CONTRACTS, CONFIDENCE, AND CONTINUOUS EMPLOYMENT: THE RELATIONSHIP BETWEEN LABOR MARKET POLICIES AND PERCEIVED JOB SECURITY

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CONTRACTS, CONFIDENCE, AND CONTINUOUS EMPLOYMENT: THE RELATIONSHIP BETWEEN LABOR MARKET POLICIES AND PERCEIVED JOB SECURITY

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By examining the impact of labor market policies on employees' perceptions of job security, this dissertation seeks to understand the mechanisms through which formal institutions generate confidence and positive expectations among individuals regarding their economic future. The following questions guide my research: *Does dismissal protection give employees confidence in the continuity of their jobs? Do unemployment benefits increase employees' confidence of finding a new job and reduce their worries about job loss?* In addition to the intended consequences, I also explore the unintended effects of labor market policies. Specifically, I ask: *Does the presence of temporary employees affect perceived job security? To what degree do temporary workers mediate the effects of other policies?*

In the first empirical analysis, I apply multilevel-modeling techniques to a dataset that I created by merging large-scale survey data from individuals in 20 countries with macro-level information from various data sources. The second empirical analysis involves in-depth interview data collected from employees at one German and one American university. The quantitative data allow me to identify

associations between national-level policies and perceptions across a large sample of countries, and the qualitative data help me to meaningfully interpret and supplement these results.

My main finding is that perceptions are not always congruent with economic and institutional facts. Organizational characteristics and individual differences seem to be more relevant than national-level policies to how workers feel about their jobs. The second important finding is that the effects of policies vary depending on their design. Formal institutions that reduce vulnerability by providing assurance (*unemployment benefits*) and by establishing a comparison group with lower levels of protection (*temporary workers*) seem to be more effective in instilling confidence and positive expectations than those that increase the costs for unilateral breach of contract (*dismissal protection*).

These findings are of theoretical importance in challenging the implicit rationality assumption that formal institutions always achieve their intended outcomes, an assumption which underlies the bulk of comparative research on welfare states and national production systems. They are also of practical relevance, as they can help to inform the development of labor market policies and organizational measures intended to increase workers' sense of job security.

BIOGRAPHICAL SKETCH

Lena Hipp grew up in Aach, a little village in the very South of Germany. After graduating from High School, she worked as a volunteer in a school for handicapped adolescents in Metz, France. She pursued her studies in French literature and political science at Albert-Ludwigs-Universität, Freiburg, Institut d'Etudes Politiques Paris, and Freie Universität Berlin. Before coming to the U.S. to start graduate school in 2005, she worked as a policy advisor in the German Parliament. Her research interests lie at the intersection of social psychology, organizational theory, and comparative sociology.

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The contribution of each person and organization improved the quality of this work. Any flaws and shortcomings in the text and the analyses are, of course, strictly my own.

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CHAPTER 1

INTRODUCTION

By analyzing the association between labor market policies and perceived job security, this dissertation addresses the question of whether and how formal institutions can generate confidence and positive expectations among individuals regarding their economic future. While individual and organizational characteristics that contribute to individuals' feelings of job security have been widely explored (e.g., De Witte, 1999; Dekker & Schaufeli, 1995; Heaney, Israel, & House, 1994; Kinnunen, Mauno, Natti, & Happonen, 2000; Roskies & Louis-Guerin, 1990; Sverke, Hellgren, & Näswall, 2002), the larger contextual causes of job security have received much less attention (Erlinghagen, 2008; Clark & Postel-Vinay 2009, comparing levels of job perceived security within Europe, Anderson & Pontusson, 2007, examining data for 1997 and also including non-European countries).

I therefore apply an institutional approach to individual-level perceptions of job security and seek to answer the following questions: *What are the mechanisms through which institutions generate such confidence and positive expectations? Can national labor market institutions and policies make employees less worried about their economic future? Does dismissal protection give employees confidence in the continuity of their jobs? Do generous unemployment benefits increase employees' confidence of finding a new job of comparable quality – either because they can take their time to carefully look for a new job or because they receive counseling and training?*

While these questions focus on the (presumably) intended consequences of labor market policies, I also explore the (again presumably) unintended consequences of policies for individuals' sense of job security, namely the impact of the presence of temporary workers on perceptions of job security. In many places, temporary workers have been used to offset organizations' lack of external flexibility caused by the stringent protections against lay-offs of regular workers. Therefore, I also ask *Does the presence of temporary employees in the labor force affect feelings of job security, and does this mediate the effects of other national labor market policies?*

Answering these questions is important for several reasons. First, subjective perceptions and interpretations of situations often entail "real" outcomes, even if they are based on "incorrect" interpretations of the environment (Diamond & Dybvig, 1983; Merton, 1995; Thomas & Thomas, 1928). Especially in times of economic turmoil and uncertainty, it is critically important that employees, employers, and consumers remain confident of an eventual return to prosperity. If consumers believe that a recession will draw to a close, economic demand will increase. If, however, employees believe that their jobs are endangered (even if they actually are not), they suffer from the negative psychological and physiological consequences associated with a lack of job security (Ashford, Lee, & Bobko, 1989; Ferrie, 2001; Sverke et al., 2002), and employers have to deal with decreased loyalty, reduced organizational commitment, and elevated turnover rates (De Witte & Naeswall, 2003; Hellgren, Sverke, & Isaksson, 1999). The economy as a whole, moreover, can be harmed by slumps in consumer spending and excessive wage restraints (Benito, 2005; Green, Felstead, & Burchell, 2000).

Second, uncovering the link between macro-level institutions and micro-level perceptions will aid us in understanding the conditions under which formal institutions such as laws, policies, and contracts generate confidence and positive expectations, in particular in unequal exchange relationships, as is the case in employment. This question has thus far received inadequate attention. Experimental research in behavioral economics, for example, has examined the emergence of positive expectations only in the context of an exchange relationship between equals, but not among parties with unequal power (e.g., Berg, Dickhaut, & McCabe, 1995; Bolle, 1998; Buskens & Weesie, 2000; Kollock, 1994, who used measures of trust and giving behaviors as the outcome variable).

Third, this study tests the implicit assumption underlying the design of many policies and the large bulk of the comparative welfare state literature. Both policymakers and researchers often assume that policies and regulations impact human behavior in specific ways. Policymakers use regulations and policies to channel human behavior; researchers use the presence or absence of particular institutional arrangements to explain cross-national differences in economic development and performance. For example, in their influential work on the comparative institutional advantages of different capitalist systems, Hall and Soskice (2001b) contend that formal institutions, such as labor laws and welfare provisions, enable firms to pursue specific business strategies. They argue that employers in countries with generous unemployment benefits and stringent employment protection are more likely to invest in the training and education of their workers than employers in those countries with less generous benefits and less stringent protections. The benefits and protections,

moreover, also make it less risky for workers to acquire firm or industry-specific skills, either because they have the prospect of staying with a particular employer for an extended period of time or because they will have the time to look for a job that matches their qualifications in case of a lay-off (Estevez-Abe, Iversen, & Soskice, 2001; Hall et al., 2001b). While this argument is plausible, few studies have actually examined whether, and to what degree, the assumed relationships between national policies, organizational practices, and individual perceptions and decision-making do in fact hold true. I therefore seek to fill this gap with two studies that focus on the relationship between national-level labor market policies and individual-level perceptions of job security.

My main focus is on exchange situations in which power and dependence are unequally distributed between the parties. In other words, I am most interested in situations in which a party A is more dependent on a party B to achieve a valued outcome, so that B has more power over A than vice versa. A's dependency, and thus B's power, is based on the value of the exchange outcome as well as on the degree to which A has alternative exchange opportunities. This relational view of power, which promotes power and dependency as two inversely-related concepts, originates from social exchange theory (Emerson, 1972 a, b) and is particularly useful in analyzing employee-employer relationships (e.g., Shore & Tetrick, 1994. The patient-physician relationship would be another example for unequal power and dependency within an exchange context.).

I examine the efficacy of three institutional mechanisms that can help exchange partners, particularly those with little power within the relationship, to

develop confidence and positive expectations about their situations: first, increasing the costs of a unilateral breach of contract (i.e., reducing power differentials between exchange partners); second, providing compensation in case of a unilateral breach of contract (i.e., reducing vulnerability); third, establishing a comparison group with lower levels of protection (i.e., decreasing relative risks and vulnerability).

In the first study, I apply multi-level analyses to a large-scale, cross-national survey dataset that I merged with national-level information on public policies and economic conditions in order to explore the relationship between macro-level policies and micro-level perceptions across a large number of countries. In the second study, I analyze qualitative data that I collected in in-depth interviews with employees at one German and one American university in order to more fully explore the sources of some of the counterintuitive findings of the first study and to assess the consequences of variations in perceived job security.

The first chapter reviews the comparative welfare state literature with respect to the theoretical question of how institutions generate the confidence and positive expectations needed to make exchanges happen. The three distinct mechanisms that potentially increase confidence in a positive exchange outcome are then applied to the specific context of employment contracts and employees' perceptions of work-related security. Chapter 2 elaborates on the concept of perceived job security as well as on its causes and consequences, while Chapter 3 does the same for national-level labor market institutions and their presumably intended and unintended effects on workers' perceptions of job security. In Chapter 4, I develop hypotheses regarding the relationships between different types of labor market policies and the various facets of

perceived job security. The first empirical analyses of this dissertation are presented in Chapter 5, in which I describe the sources and structure of the quantitative data, explain the multi-level estimation approach used in the study, and present and discuss the results. In Chapter 6, I use the qualitative data to further interpret the findings of the first study to obtain a deeper understanding of what makes employees feel secure about their jobs. Here again, I first describe the data, their origin, and my analytical approach. I conclude in Chapter 7 with a general discussion of the role of institutions in generating confidence and positive expectations in unequal exchange relationships, after which I discuss the contributions of this study and its limitations.

CHAPTER 2

THEORETICAL BACKGROUND

Rational choice approaches to institutions in the comparative welfare state and labor market research

Comparative research into political and economic institutions and their consequences for the organization of human life has a long tradition in the social sciences and has grown steadily with the expansion of welfare state activities by local and national governments (Montesquieu, 1949 (1750); Tocqueville, 1945 (1835, 1840) are two of the earliest examples of such comparative studies). Scholars in sociology, political science, and economics have dealt with the question of how institutions shape the organization of work, individual well-being, and economic life in general (e.g., Abramovitz, 1988; Blanchard & Landier, 2002; Esping-Andersen, 1990, 2000; Fligstein, 2001; Lewis, 1992; Marler & Tolbert, 2003; Moran, 2000; Muffels, 2002; Orloff, 1993; Pierson, 1994, 1996; Scharpf, 2000; Scharpf & Schmidt, 2000; Titmuss, 1968). One of the major implications of this research is that the institutions of the welfare state are not only a reaction to but also a constitutive part of modern capitalism and economic organization (Polanyi 1944).

In this literature, but also more generally, institutions are defined as the widely accepted social understandings that establish stable frameworks for ongoing interactions, thereby governing the behavior of organizations and individuals within particular communities and establishing social order (e.g., Durkheim, 1964; Giddens, 1984; North, 1990; Parsons, 1951; Scott, 2008; Selznick, 1957). This broad definition implies that institutions can be both formal, e.g., contracts, laws, or policies, and

informal, e.g., norms, customs, or traditions.[1] While the latter are often resistant to purposeful alteration, policymakers often enact change in formal institutions in order to influence individual and organizational choices in particular ways (e.g., Esping-Andersen, 1990; Hall et al., 2001b; Kalev, Dobbin, & Kelly, 2006; Korpi & Palme, 1998; March & Simon, 1957).

The rules and incentives embedded in welfare institutions and economic policies reflect this motive. For example, to increase consumer spending and to create jobs, national governments have cut taxes. To direct individual spending to particular economic sectors, they have provided subsidies for the purchase of certain goods and services, such as the "cash-for-clunkers" program in the U.S. and the "scrapping premium" in Germany during the financial crisis in 2008/09 (GAO/Clowers, 2010). To offset decreasing old age pension benefits, policy makers have offered tax deductions to encourage retirement saving (e.g., Hinrichs, 2000). To foster entrepreneurial activities, they have relaxed bureaucratic regulations and provided easy access to capital (e.g., Torrini, 2005). To encourage individual labor market and reproduction behaviors, they have established family policies that help parents to combine work and family duties (Bothfeld, 2005; Ferrarini, 2003). To stabilize the economy in times of economic downturns, they have established rules for lay-offs and imposed taxes or social contributions to support the unemployed (i.e., regulations and policies which economists call "automatic stabilizers"; e.g., Esping-Andersen, 1985; 1990; Korpi, 1983; Stephens, 1979). In short, variations in social policies and labor

[1] In this dissertation, the term "formal institutions" encompasses all types of governments policies, laws, and regulations; the terms are therefore also used interchangeably.

market legislation are intended to produce changes in established behaviors of individuals and organizations.

The idea that formal institutions funnel individuals' and organizations' actions in specific ways has also been promoted by scholars from the "Varieties of Capitalism" tradition. In their influential work on the two ideal types of capitalist economies – the U.S. as the prototype of a liberal market economy and Germany of a coordinated market economy – Hall and Soskice (2001b) argue that firms, as the key actors in capitalist economies, make strategic decisions according to their technological, economic, and institutional environment, thereby influencing the behavior of employees, stakeholders, unions, and business associations. Due to differences across countries, firms encounter varying degrees of the typical agency and coordination problems, such as moral hazard, adverse selection, and shirking (Milgrom & Roberts, 1992). For example, by affecting the costs for employers to hire and fire workers, national welfare state policies and labor market institutions also influence employers' decisions to train workers. In addition, they affect workers' willingness to acquire firm or sector-specific skills.

In the presence of generous unemployment benefits and stringent employment protection, as is the case in coordinated market economies, providing and acquiring firm or industry-specific skills does not involve great risks for either the employer or the employee. If workers are well-protected against sudden lay-offs, feel secure about their jobs, and can take their time to look for a new job that matches their skills and needs, investing in firm or industry-specific skills is likely to contribute to professional advancement and is therefore a reasonable investment. When these regulative

employment institutions are absent or only poorly developed, as is the case in liberal market economies, neither firms nor employees feel confident about entering a long-term relationship and thus will not be inclined to make similar investments in the employees' human capital. If workers can be easily laid off and cannot rely on generous unemployment benefits ensuring that they will have the time to find jobs that match their qualifications, they profit more by being generalists who are able to work in many different jobs (Becker, 1964; Crouch, 2005; Estevez-Abe et al., 2001; Mares, 2000; Soskice, 1999; Swenson, 2002; 2004).[2] The implicit assumption underlying the central argument of the "Varieties of Capitalism" framework (Hall et al., 2001b) is thus that institutions work in the way they are intended to work and that they are perceived accordingly; that is, stringent dismissal protection and generous unemployment benefits assure workers that acquiring specific skills is worth the investment.

Although the comparative literature on welfare states has repeatedly argued that institutions impact individual and organizational outcomes, it is unclear whether a) formal institutions achieve their intended outcomes under all circumstances and b) all types of formal institutions have the same propensity to effectively influence individual and organizational actions. Research on the functioning of institutions is helpful in providing an answer to the first question, and the second can be answered

[2] These tendencies are fortified in that welfare state policies and regulations also affect workers' capacity to form unions and go on strike (Manow, 1997; Rothstein, 1992). Since the acquisition and provision of different skill sets has a major impact on the innovation strategies that organizations in different countries pursue, Hall and Soskice (2001b) even argue that the two distinct types of skill regimes yield distinct production and innovation regimes. Incremental innovations are more likely to occur in coordinated market economies and radical change and innovations in liberal market economies.

by closely considering the different mechanisms that institutions can rely on, as will be shown in the following sections.

Different types of institutions and their functioning

Scott's (2008) distinction between regulative, normative, and cognitive-cultural pillars of institutions is helpful in comprehending the various ways in which institutions can impact perceptions, attitudes, and behaviors. The regulative pillar of an institution consists of its formal and legal elements, the normative pillar of informal norms and social obligations, and the cognitive-cultural pillar of the interpretative processes and the taken-for-granted behaviors shaped by the external culture (Scott 2008: 50ff). In other words, individuals and organizations can act on incentives and enforceable rules, perceived social obligations, and taken-for-granted norms and beliefs, as well as their interactions. Formal policies and institutions provide deterrents and incentives; they can confer power upon individuals and organizations through laws, policies, the allocation of resources, or formal positions in a hierarchy (Barley & Tolbert, 1997). Moreover, they influence behaviors of individual and collective actors by conveying normative frameworks and shaping the attitudes and perceptions of those who act within their sphere of influence (Hall & Soskice, 2001a). While these three institutional "pillars" can be distinguished analytically, they are actually difficult to distinguish in practice, as they form a continuum ranging from the conscious to the unconscious, from the legally enforced to the taken-for-granted, and operate simultaneously and in interaction with each other (Hoffman, 1997: 36).

Employment relationships, for example, are based on national laws and regulations and the contractual agreement between the employee and the employer. However, like most contractual agreements, employment contracts do not yield positive outcomes *only* because of these regulative aspects, since they are not able to specify all possible contingencies and cannot fully exclude the risk of opportunism and malfeasance (Frey & Jegen, 2001; Luhmann, [1968] 1979; Williamson, 1975, 1985). In contrast to sale agreements, which regulate the details of a discrete transaction, the employment contract is characterized by a high degree of openness, specifying only the most fundamental terms of the exchange, such as job description, working hours, salary, fringe benefits, and the conditions of job termination, while leaving open the specifics, such as the exact date of completion of the tasks and their actual implementation (Marsden, 1999). Despite the contractual agreement, employees may withhold effort and knowledge and may leave the organization when better employment opportunities arise. Likewise, employers may lay off employees in times of economic downturn and hire new ones in times of high economic demand, instead of retaining employees in exchange for their efforts, commitment, and performance.

Therefore, cultural norms and customs, as well as informal expectations and mutual trust, are other important elements that contribute to the smooth functioning of work arrangements. The mutual beliefs and unwritten expectations of the employer and the employee – also known as the "psychological contract" (Argyris, 1960; Robinson, 1996; Rousseau, 1995; Rousseau & Greller, 1994; Rousseau & Schalk, 2000; Schein, 1980; Shore et al., 1994) – are important sources of confidence that influence individuals' attitudes and behaviors. The implicit terms of the

"psychological contract" help both parties to reduce uncertainty and ambiguity. While the employee has the feeling of being able to influence her or his work situation, the employer benefits from this implicit agreement because she or he can be confident that the employee will do what is expected, even in the absence of any surveillance mechanism.

What becomes clear from the explanations above is that the formal elements of institutions are linked to the normative and cognitive-cultural elements of institutions and vice versa and that both formal and informal elements of institutions can influence perceptions, attitudes, and expectations (DiMaggio, 1988; Friedland & Alford, 1991; Meyer & Rowan, 1977; Ruef & Scott, 1998; Tolbert, 1985; Tolbert & Zucker, 1983; Zucker, 1991). Even incomplete knowledge of the laws and regulations underlying contractual agreements or the general stipulations of these agreements influence the individuals' expectations and beliefs and thereby make exchanges possible.

For example, savers entrust their money to financial institutions without knowing how well their assets are protected in the case that the bank runs into difficulties, simply because they have some basic trust in the competence of these organizations and the protective responsibilities of the supervising institutions. Likewise, eating food and taking medication without doing intensive background research about the ingredients and adverse effects is possible only because we know that others also consume these products and that the certifying agencies, such as the FDA, have tested and approved them. In the context of the employment relationship, the formal agreements in combination with the mutual beliefs and unwritten expectations make it possible for employees to do their work without being worried

that they will lose their jobs and income the very next day (Robinson, 1996; Rousseau, 1995; Rousseau et al., 2000).

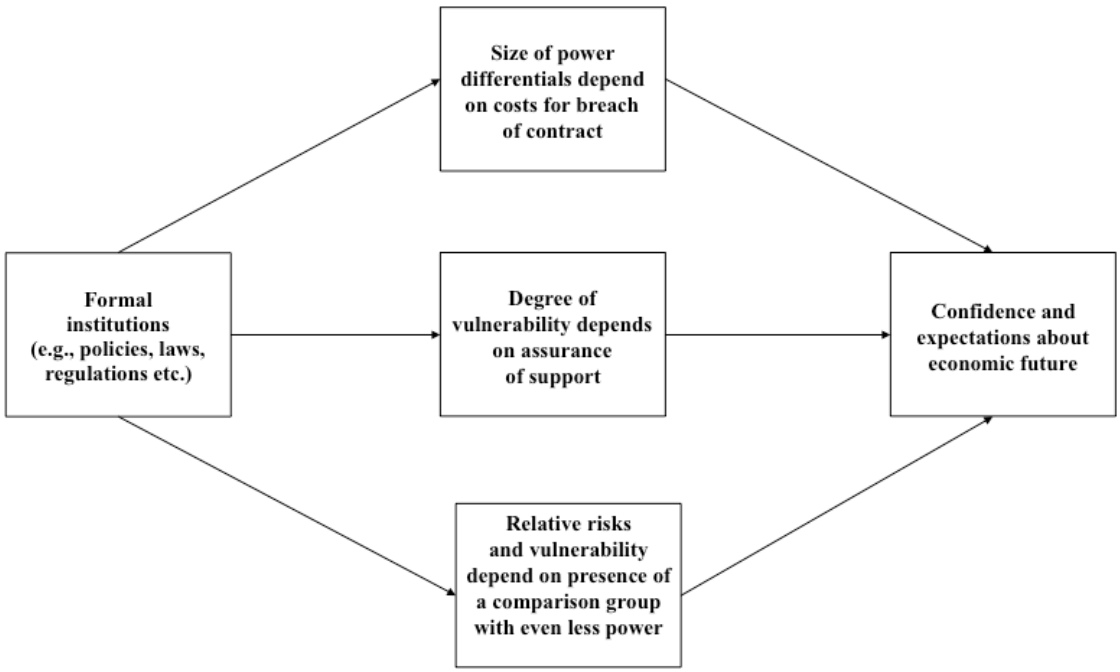
In addition to considering these vague beliefs about how institutions work, I argue that the different institutional mechanisms potentially influencing expectations about exchange outcomes should be distinguished in order to clarify the conditions under which formal institutions indeed impact individual and organizational actions. Like any other contractual agreement, employment contracts reduce the uncertainty surrounding an exchange by specifying what is expected of each party. The laws and regulations that are incorporated in the employment contract acknowledge the differences in power and dependence between exchange parties and aim to protect the low-power partner from exploitation (Bacharach & Lawler, 1981; Fox, 1974).

To varying degrees, labor laws and collective bargaining agreements all over the world strengthen the employee's position in the employment relationship by supplementing the employment contract with provisions of fairness and cooperation (Gabel & Feinman, 1998; Gundlach & Murphy, 1993; Posner, 1995; Shiffrin, 2000). Such institutions can protect workers from having to agree to obligations without defined limits (Coase, 1937; Marsden, 1999), thereby adjusting the inequalities in structural power between the employee and the employer (Bacharach et al., 1981; Fox, 1974). These laws and regulations differ considerably across countries and have been intensively studied by comparative researchers (Clarke 2004; Clasen 2005; Esping-Andersen 1990, 1996, 1999; Fligstein 2001; Lewis 1992; Muffels and Fouarge 2002; Orloff 1993; Hall and Soskice 2001; Rueda and Pontusson 2000; Swenson 2004). What has remained under-researched thus far are the various mechanisms that underlie

such policies and regulations and their effects on the exchange partners' expectations and confidence about the outcomes of agreements.

A close examination of the different types of welfare state and labor market policies, however, reveal three mechanisms by through which institutions can affect exchange partners' expectations. For one, formal institutions can impose costs on the party that breaches the contract and thereby reduce the power differentials between exchange partners. In addition, they can provide compensation to the injured party in case of a unilateral breach of contract. A third mechanism that may help individuals to feel confident about a positive exchange outcome is the presence of a reference person, or reference group, that is more likely to be dismissed first, thus providing a buffer for the focal actor. These ideas are captured in Figure 1.

Figure 1: Institutional Mechanisms Generating Confidence and Positive Expectations



Three types of labor market policies capture these types of institutional mechanisms. Dismissal protection reduces the power-differentials between the employee and the employer; unemployment benefits provide workers with compensation in case they are laid off by their employers; legislation regarding the employment of temporary workers strengthen the relative position of permanent employees by affecting employers' possibility to flexibly adjust their personnel through temporary positions.

Although these institutions are presumably created to assure employees of certain protections and thus to influence their behaviors in predicted directions, there are a number of reasons for why we can still not be sure that institutions indeed produce their intended outcomes. Previous work in sociology and psychology – and more recently also in behavioral economics – has challenged the idea that institutions always work in a straightforward way, as the literature review in next section illustrates.

Challenges to the rational choice approach towards forma l institutions

With his seminal paper *The Unanticipated Consequences of Purposive Social Action* (1936), Merton popularized the idea that institutions may encounter attitudinal and behavioral outcomes that are neither planned nor expected (e.g., McKinley & Scherer, 2000; Rogers, 1995; Tenner, 1997). Institutions may not work as intended, either because their design is flawed, e.g., the incentives and sanctions set in place do not work, or because individuals do not embrace them as expected, e.g., they are unaware of the existence of certain policies and regulations or may not perceive them as

legitimate and therefore ignore them. Error and ignorance due to the complexity of social life and lack of information can lead to unintended consequences, including short-term orientations, perverse incentives, and unstable preferences (Ariely, Loewenstein, & Prelec, 2006; Festinger, 1957; Hipp & Warner, 2008; Lee, Amir, & Ariely, 2009; Simon, 1947, 1957).

A famous example of a policy that had unexpected outcomes was the ban on the production, transportation, and sale of alcohol in the U.S. in the early 20th century. While Prohibition was successful in reducing the amount of alcohol consumed, it eliminated neither its sale, manufacture, nor transport. Instead, the increased profitability of the illegal alcohol industry drove small suppliers out of business and made the trade of alcohol more attractive. A less severe but also unintended consequence was the emergence and rise of the soft-drink industry (Hiatt, Sine, & Tolbert, 2009).

The reasons why institutions fail to achieve their stated outcomes but rather produce unexpected results are manifold. Work by social psychologists, for example, has extensively documented common biases that affect individual decision-making (Kahneman & Tversky, 1979; Tversky & Kahneman, 1974, 1981); human beings have trouble using statistical information appropriately when making decisions. They assume that past events alter the probabilities of future events or weight initial events more heavily than subsequent ones. Human beings tend to overestimate the risk of events that have occurred recently, that are unusual, or of which they have vivid memories (*availability bias*).

Hence, personal experience and observations may exert a much more powerful influence on individuals' perceptions than abstract policies and regulations. For example, the more experience people have with unemployment, the less confident they may be about keeping their jobs despite good protections against lay-offs. Knowing that others have lost their jobs and have then had a hard time finding new ones (or had no problem at all) may also have a stronger impact on workers' optimism about quickly finding new jobs than the support given to laid-off workers by unemployment insurance programs (see Gilovich, Griffin, & Kahneman, 2002 for an overview on the long list of cognitive biases).

Moreover, social comparisons and subjective perceptions may influence a person's satisfaction with her or his situation more than the actual situation itself (Crosby, 1982; Stouffer, 1949). Comparisons reveal what one person has in relation to others, and research has shown that comparisons with those with similar positions and rank, of the same age, or with comparable experience are especially important for individual well-being, satisfaction, aspirations, and attitudes (Davis, 1966; Pettigrew et al., 2008; Runciman & Bagley, 1969; Yitzhaki, 1979). For example, in his studies on the American military after World War II, Stouffer (1949) showed that soldiers in units with high rates of promotion, i.e., an objectively favorable situation, had lower morale and greater dissatisfaction with the promotion system than their counterparts in units with lower rates. Crosby (1982) made a similar discovery when she compared men's and women's job satisfaction in relation to their respective earnings. In spite of considerably lower wages, women were not any less satisfied with their jobs than men.

The explanation for these findings is that individuals apply varying frames of reference when assessing their situations (Tversky et al., 1981; 1986). The soldiers in units with a greater likelihood of promotion who did not get promoted were more aware of the opportunities for promotion than their counterparts in units with lower rates of promotion and felt that they did not get what they deserved. Likewise, rather than comparing their situation to those of their male counterparts, women compared themselves to other female workers and therefore did not report greater anger or dissatisfaction with their work, despite lower wages.

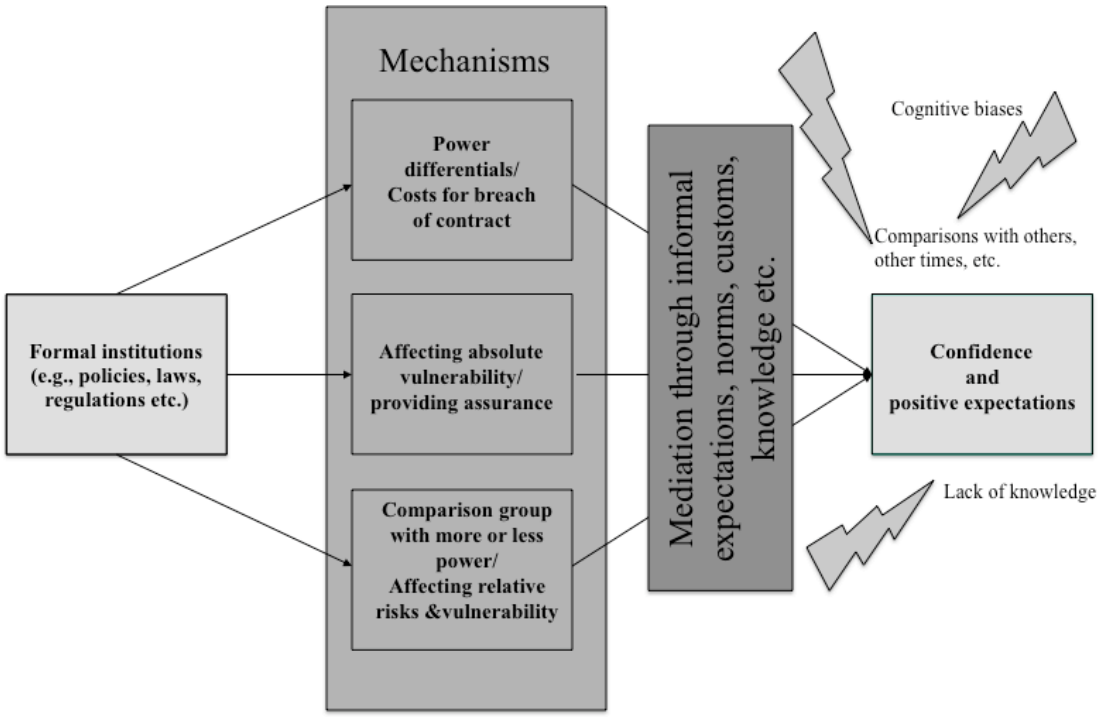
In addition, some institutions and policies may be ineffective or produce unexpected outcomes simply because individuals or organizations are unaware of their existence or have false or incomplete knowledge regarding the policies and regulations in place. For example, in their study of psychological and legal contracts, Roehling and Boswell (2004) showed that employees in the U.S. working under at-will contracts still believed that their employer would need to have a good reason to lay them off. Despite signing the clause stating that both the employee and the employer can end the employment relationship at any point "for good cause, or bad cause, or no cause at all," employees believed that some sort of warning system was in place or that at least some justification was required to end the employment.

The reasons for such misjudgments and miscalculations can also be found within the bundle of explanations that social psychologists have identified to explain individuals' poor decision-making and information-processing skills (Ariely & Jones, 2008; Festinger, 1957; Gilovich et al., 2002). Individuals may under- or overestimate the protective effects of policies and regulations as they are included/written in

employment contracts because they rely on only one piece of information rather than considering all information available (*anchoring effect*) or because they draw general conclusions about someone's personality or an organization's culture based on one specific piece of information (*halo effect*). Applied to the context of Roehling and Boswell (2004), who studied workers' assessments of their protection against lay-offs, these biases can provide an explanation for why employees are more likely to incorporate their observations of previous terminations than the written terms of the actual contract into their evaluations of their level of job protection. It could also be that they overestimate their rights because they have a positive image of their supervisors or the organization and therefore tend not to think of the formal agreement they have with the organization.

Figure 2 provides an overview on the argument that has been made thus far, i.e., the types of institutional mechanisms that potentially instill confidence and positive expectations along with possible mechanisms preventing these institutions from operating in a straightforward way.

Figure 2: Relationship between Formal Institutions and Confidence and Positive Expectations



Whether these institutional and cognitive shortcomings actually limit the capacity of formal institutions and policies to generate particular behavioral or attitudinal outcomes is one of the questions that drives this dissertation. My subject is the relationship between labor market policies and perceptions of job security. Since the legal basis of employment relationships varies across countries, it is possible to examine whether and to what degree labor market policies impact individuals' expectations about their future employment prospects. The next section will therefore elaborate in more detail on the concept of perceived job security, its consequences, and its causes.

CHAPTER 3

PERCEIVED JOB SECURITY

Since the relationship between the employer and the employee is characterized by unequal power (i.e., the employee is more dependent on the employer than vice versa and therefore has less power within the relationship; see Emerson, 1962; Lawler, 1992; Lawler, Thye, & Yoon, 2008; Lawler & Yoon, 1993) workers cannot be sure that they will not have to leave their jobs unwillingly. Thus, it would not be surprising if they worried about this prospect. Since work is not only a source of income but also contributes to individual development, the emergence and maintenance of personal relationships, and social status (Jahoda, 1982), the threat of losing a job actually involves far more than just the loss of income, as it strongly impacts workers' psychological and physical well-being (Sverke et al., 2002). The following section defines perceived job security and then reviews the literature regarding its relevance and origins.

Definition of perceived job security

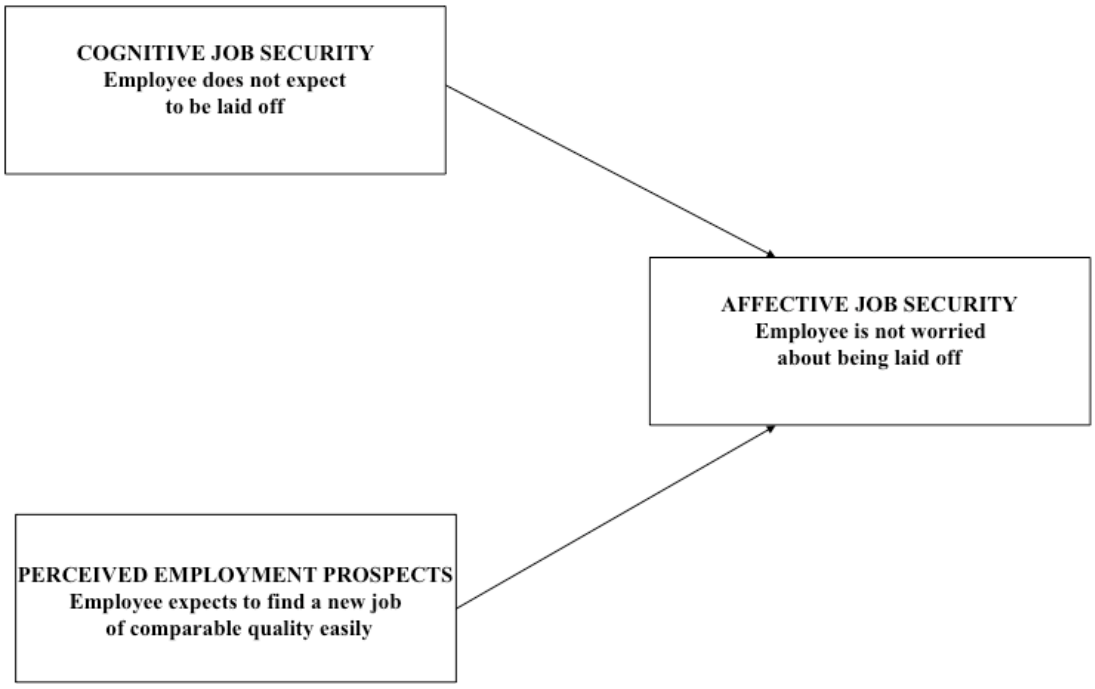
Perceived job security is a psychological construct describing employees' belief that they have some sort of power and control over their current job situation.[3] This definition of job security encompasses three dimensions. Individuals can be

[3] Although the literature on needs and motivation has been the basis for the research on *security in organizations* (Greenhalgh and Rosenblatt, 1984: 439f), the term "job insecurity" rather than "job security" is most commonly used by industrial/organizational psychologists. Since the focus of this paper is on the propensity of institutions to generate positive expectations, I prefer to continue using the term "job security."

confident of *staying in the same job* (Davy, Kinicki, & Scheck, 1997; Heaney et al., 1994) or of the possibility of *quickly finding a new job* of comparable quality (Wilthagen & Tros, 2004). Both perspectives imply the *absence of worry regarding job continuity or loss.* Such absence of worry is the third element of perceived job security (Klandermans & Vuuren, 1999; Rosenblatt & Ruvio, 1996).

In my dissertation, these three facets of *perceived job security* will be kept separate. Thus, I distinguish between (a) *cognitive job security*, that is, the perceived probability of job loss; (b) *perceived employment prospects*, that is, the perceived availability of alternate job opportunities; and (c) *affective job security*, that is, the absence of anxiety related to a potential job loss and/or not finding a new job. Previous research has shown that these concepts do not necessarily overlap but that they are related (Anderson & Pontusson, 2007; Borg & Elizur, 1992). If workers feel confident of keeping their jobs (high cognitive job security), they may be less worried about job loss (high affective job security). Likewise, if they are confident that they will be able to easily find an equally good job (high perceived employment prospects), they may not be worried about unemployment – even if they are not confident of staying with their current employer. Table 1 summarizes the definitions of cognitive job security, perceived employment prospects, and affective job security and indicates how they might be related.

Table 1: Types of Perceived Job Security



Consequences of a lack of perceived job security

In the large body of research on perceived job security, the consequences of lacking job security have been of paramount importance. While economic theory suggests that job security – especially "too much" job security – has negative consequences for organizational performance (e.g., Khan & Rehnberg, 2009; Shapiro & Stiglitz, 1984)[4], empirical work by psychologists has shown that the consequences of lacking job security are predominantly negative for individuals, organizations, and society as a whole (e.g., De Witte 1999, 2005, Green et al., 2000; Smithson & Lewis, 2000; Sverke et al., 2002).

[4] Economists tend to assume that employees are primarily motivated by extrinsic incentives and therefore often use the example of public sector employees, who have "real" job security, to illustrate that too much job security has detrimental effects on workers' performance.

Individual-level consequences. The prospect of losing a job is stressful because work secures not only one's material well-being but also social integration, recognition, and structure in one's daily life (Jahoda, 1982). Individuals who perceive that their jobs are at risk have to deal with a high degree of uncertainty. Such uncertainty about their future prevents employees from reacting appropriately and tends to be as stressful as or even more stressful than actual job loss (Dekker et al., 1995; Latack & Dozier, 1986; Latack, Kinicki, & Prussia, 1995; Lazarus & Folkman, 1984). Common "coping strategies" for actual job loss, including mourning and preparing for a new situation, are therefore of only limited use (Ashford, 1988; Lazarus et al., 1984; Miller, 1979; Mineka & Hendersen, 1985; Warr, 1987).

In consequence, a lack of perceived job security leads to strain, worries, and anxiety. It reduces individual well-being (Barling & Kelloway, 1996; Hartley, 1991; Hellgren et al., 1999) and fosters physical and mental health problems, including sleep disruptions, dizziness, or loss of appetite (Ashford et al., 1989; Burchell, 1994; De Witte, 1999; 2005; Ferrie, 2001; Ferrie, Shipley, Newman, Stansfeld, & Marmot, 2005; Sverke et al., 2002 for an overview).

Organizational-level consequences. Employees' lack of job security also has detrimental effects on organizations. Not only will their health change for the worse, leading to absence, but their attitudes and behaviors towards the organization will deteriorate as well (Greenhalgh & Rosenblatt, 1984). The implicit terms of the exchange between employees and employers, i.e., the "psychological contract" (Rousseau, 1995), becomes distorted when the employee's loyalty vis-à-vis the organization is not reciprocated, for example by the provision of a secure job. Several

studies have shown that lack of job security is associated with a decrease in job satisfaction (Ashford et al., 1989; Blanchflower & Oswald, 1999; Cuyper & Witte, 2006; Heaney et al., 1994; Rosenblatt et al., 1996) and a decrease in job involvement (Feather & Rauter, 2004; Hellgren et al., 1999; Probst, 2000).

Moreover, when workers doubt that their future employment is secure, their organizational commitment declines (Borg et al., 1992; Davy et al., 1997; De Witte et al., 2003; Lum, Kervin, Clark, Reid, & Sirola, 1998; Pillay, 2010), as does their trust in the organization (Ashford et al., 1989; Borg et al., 1992; Gilbert & Tang, 1998; Kinnunen et al., 2000), and although work performance in general is not contingent on perceived job security (Pearce, 1998; Robinson, 1996; Rosenblatt et al., 1996; Rosenblatt, Talmud, & Ruvio, 1999; Sverke et al., 2002; Yousef, 1998), voluntary turnover increases, particularly among those with high qualifications and good labor market prospects, when employees believe that their future with the firm is in jeopardy (Barling et al., 1996; Chirumbolo & Hellgren, 2003; Pfeffer, 1998; Sverke & Hellgren, 2001; Sverke et al., 2002).

Societal and economic consequences. The negative impacts of the lack of job security are also reflected on the broader societal and economic level. Wage restraints and slumps in consumer demand are two negative consequences of lacking job security which harm the entire economy. If workers do not feel secure about their jobs, they do not ask for wage increases and tend to save their money instead of spending it, especially with regard to larger investments (Benito, 2005; Green et al., 2000). This has particularly negative effects on the housing market and possibly also on the

acquisition of human capital, further fostering labor market segmentation and economic inequality (ibid).

In sum, the negative effects that a lack of perceived job security has on employees, their organizations, and the larger societal and economic environment can be either direct or indirect, as well as short-term or long-term. Table 2 summarizes all of the above-mentioned relationships.

Table 2: Consequences of Lack of Perceived Job Security

	Individual Level	**Organizational Level**	**Societal Level**
Short-term Consequences	Job Satisfaction ↓ Job Involvement ↓	Organizational Commitment ↓ Organizational Trust ↓	Consumer Spending ↓ Wage Restraints ↑
Long-term Consequences	Health ↓ Mental Well-Being ↓	Job Performance ~ Perceived Job Performance ↓ Turnover (Intention) ↑	Economic Inequality ↑ Labor Market Segmentation ↑

Note: ↑ Increase, ↓ Decrease, ~ no association
Source: Adapted from Sverke et al., 2002

While there is a broad consensus on the existence of the negative consequences of lacking job security in the academic literature, it is not entirely clear *how bad* the negative consequences actually are. In their meta-analysis, Sverke et al. (2002) show that the strength of the relationship between a lack of perceived job security and individual and organizational outcomes vary considerably across studies. The associations between the various causes of perceived job security on the individual and organizational level, on the other hand, seem to be more consistent across studies, as will be shown in the following section.

Antecedents of perceived job security

Research in organizational psychology has examined the individual-level and organizational-level antecedents of perceived job security in great detail DE WIITE (Ashford et al., 1989; Bender & Sloane, 1999; Kinnunen et al., 2000; Kinnunen & Natti, 1994; Roskies et al., 1990; Sverke et al., 2002). In general, all individual-level factors that increase employees' power in the labor market and hence reduce their dependence on a particular job have positive effects on their perceived job security, while those that increase their dependence negatively affect their perceived job security.

Individual-level antecedents. Since an individual's dependence on a job is expected to amplify the degree of anxiety, age, marital status, and the presence of children in a household are important predictors for perceived job security.[5] Older workers, especially those with a long tenure in their organization, have greater experience and are often equipped with more formal and informal seniority rights than their younger counterparts. Therefore, they usually feel *more secure* about keeping their jobs than their younger counterparts. However, since they tend to have greater difficulties finding new jobs, they may also be *more worried* about losing their jobs than younger workers. Most studies have confirmed this positive effect of age on

[5] Although no clear association between gender and perceived job security has been found in empirical studies, there are some theoretical reasons why gender is always included in quantitative analyses on perceptions of job security (e.g., De Witte, 1999; Näswall and De Witte, 2003; Böckerman, 2004). Women often have more vulnerable labor market positions than men, either due to lower levels of education or to a greater likelihood of discrimination, and may therefore have *lower cognitive job security* than men (Erlinghagen ,2008). However, the opposite may also be true. Due to their traditional role ascription as breadwinners, men may feel a greater dependence on their jobs and therefore experience more stress when facing the threat of losing them, i.e., have lower *affective job security* than women (Warr, 1987; Rosenblatt, Talmud et al., 1999).

cognitive job security and its negative effect on perceived employment prospects and affective job security (e.g., Anderson et al., 2007; Green, 2009; Näswall et al., 2003).

Being married/being in a relationship also makes individuals less worried about job loss, i.e., increases their *affective job security*. In case of need, there is always the partner's income or the possibility for the partner to start working, which can ensure the family's material well-being. Having children, in contrast, increases individuals' perceived dependence on their jobs. If more people in a household have to rely on a person's income, this person may be more worried about losing her or his job, i.e., have lower *affective job security*.

Workers' skill and qualification levels also affect perceptions of job security. Highly skilled workers usually work on a variety of complex tasks and are often difficult to replace within organizations, increasing the odds that their employers will retain them. In consequence, they should be more confident about keeping their jobs, more optimistic about finding a new job in case of lay-off, and also less worried about a potential job loss than those who are less skilled. The positive relationship between education and perceived job security has been shown in a variety of studies (Anderson et al., 2007; Ashford et al., 1989; Böckerman, 2004; Erlinghagen, 2008; Näswall et al., 2003).

Differences in personality also seem to matter. The very same situation, in terms of "objective" threats to the continuity of employment, may be perceived very differently by different individuals. While some employees might not expect that their jobs are at risk even though everything points towards personnel restructuring and dismissals, others might be worried for no reason. Likewise, while some employees

see potential job loss as a problem, others might frame it as an opportunity (Dutton & Jackson, 1987). Individual differences – self-efficacy, locus of control, affectivity, and self-esteem, in particular – have been found to be important predictors and moderators in perceived job security (e.g., Bussing, 1999; Hartley, 1991; Kinnunen, Mauno, Natti, & Happonen, 1999; Sverke et al., 2002; Sverke et al., 2004). All of the above-mentioned characteristics can thus contribute in varying degrees to individuals' interpretations of their job situation (Roskies, Louis-Guerin, & Fournier, 1993).

Organizational-level antecedents. In addition to individual-level characteristics, organizational attributes influence workers' perceptions of job security (e.g., Allen, 1986; Borg et al., 1992; Burchell, Ladipo, & Wilkinson, 2001; De Witte, 1999; Grimshaw, Ward, Rubery, & Beynon, 2001; Kinnunen et al., 2000; Roskies et al., 1990; Sverke et al., 2002). Firm size is one important predictor for affective and cognitive job security: With increasing firm size, workers tend to feel more secure about their jobs. Large firms often have internal labor markets and slack resources that allow them to employ creative solutions in times of restructuring; they can use flex-time arrangements and reduce overtime to cope with cyclical economic fluctuations and they can retrain employees to employ them in other positions or in other departments of the organization (Doeringer & Piore, 1971). Furthermore, they usually articulate more clearly what is expected of employees. Formalized job descriptions and human resource practices go hand in hand with high levels of job security. Ashford et al. (1989), for example, have shown that role ambiguity and role conflict threaten an individual's sense of control and thereby cause feelings of job insecurity.

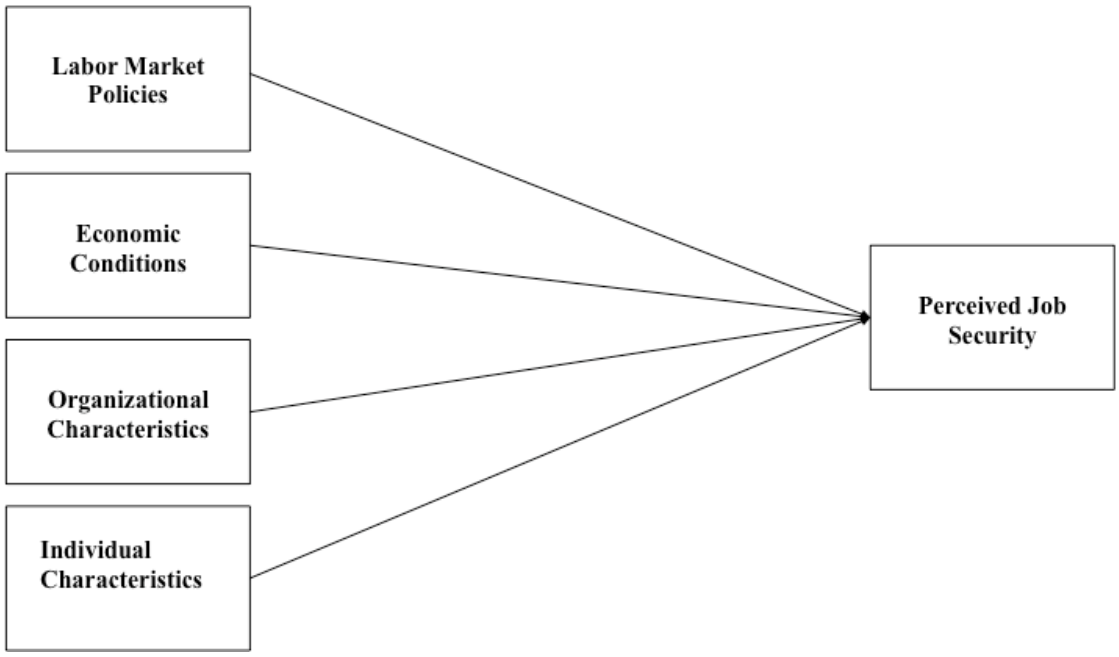
Large organizations, moreover, are also more likely to be unionized than small workplaces. Through collective bargaining agreements, workers may *be* protected against unfair dismissal and, in consequence, should also *feel* more protected against lay-offs (Freeman & Medoff, 1984; Freeman & Rogers, 1999), even though union membership does not necessarily have a positive impact on true job security (Green et al., 2000). Public sector employees enjoy high levels of job protection due either to their professional status as "public servants" or to high levels of unionization, and thus public sector employment is usually accompanied by increased levels of perceived job security.

Workers' feelings of job security, moreover, vary depending on the organization's industrial category. Employees who work in a firm or an occupation that belongs to a growing industry with a prosperous economic future and low levels of unemployment tend to have higher levels of affective and cognitive job security as well as greater perceived employment prospects. This last point leads us directly to the country-level antecedents of perceived job security.

Country-level antecedents. While the individual and organizational-level antecedents of perceived job security have been widely explored, country-level differences have been largely neglected in previous research. Although contextual factors such as unemployment rates, either on the regional or national level, were included in previous studies, studies that examine other country-level characteristics are scarce (Anderson et al., 2007; Böckerman, 2004; Clark & Postel-Vinay, 2009; Erlinghagen, 2008; Green, 2009). Since it is reasonable to believe that differences in employment contracts also affect workers' expectations (e.g., Dalton & Anderson,

2010 for the impact of contextual factors on electoral choices), this dissertation is concerned with the question of how national employment legislation and labor market policies impact perceived job security. Figure 3 summarizes the concept that perceptions of job security can, in addition to important individual and organizational-level characteristics, also be influenced by national-level institutions and economic conditions.

Figure 3: Antecedents of Perceived Job Security



CHAPTER 4

PREDICTIONS

Dismissal protection and perceived job security

By increasing the costs of firing workers, stringent dismissal protection makes lay-offs more difficult for employers. Since this should reduce the frequency of lay-offs, employees should be more confident about the continuity of their jobs. My first hypothesis therefore reflects the general rational-choice approach to institutions and states that individuals in countries with high dismissal protection should have more confidence of keeping their jobs than those in countries with little or no dismissal protection (e.g., Estevez-Abe et al., 2001). Therefore, I hypothesize:

> Hypothesis 1: More stringent levels of dismissal protection are associated with greater cognitive job security.

However, while high levels of dismissal protections decrease the likelihood of sudden lay-offs, they may not be beneficial for workers *per se*. In those countries with stringent dismissal protection, workers not only are laid-off less frequently but also have greater difficulty finding employment once they have lost their jobs. In countries with low levels of dismissal protection, in contrast, both inflows into and outflows out of unemployment are high (e.g., Esping-Andersen & Regini, 2000). This means laid-off workers in countries with high levels of dismissal protection tend to be unemployed much longer than those in countries with less regulated labor markets. Therefore, I hypothesize:

> Hypothesis 2: More stringent levels of dismissal protection are associated with lower perceived employment prospects.

Proportion of temporary workers and perceived job security

Because of these potentially adverse effects on labor market dynamics, many countries have sought to reduce labor market rigidities by making it easier for firms to hire employees on a temporary basis (Blanchard & Landier 2002, Esping-Andersen & Regini 2000). Temporary contracts provide employers with external flexibility because, by setting a fixed date for the termination of the employment contract, the employer does not have to enter into a long-term agreement with the employee (Atkinson 1985, Regini 2000).

While such partial deregulation and two-tiered employment systems help firms to adapt their staffing so as to react quickly to market demands, the effects of temporary employment on employees are negative. Risks emerging from market volatilities are transferred from the employer to the temporary employee (Breen, 1997). Since temporary employees are among the first to leave the organization in economically difficult times, they serve as a buffer for permanent employees in firms facing the need for personnel reductions (DiPrete, Goux, Maurin, & Quesnel-Vallee, 2006; Gash, 2008; Giesecke & Gross, 2003; Kalleberg, 2000; Kalleberg, 2009; Kalleberg, Reskin, & Hudson, 2000; Rueda, 2005, 2007). This should make the regular employees more confident of keeping their jobs. Although previous research on how the presence of temporary workers affects the confidence of regular employees has produced mixed evidence (e.g., Banerjee & Tolbert, 2008), I hypothesize:

> Hypothesis 3: A higher proportion of temporary workers will be associated with greater cognitive job security.

The comparison with those who are considerably less protected against lay-offs should make permanent employees feel even more secure about their jobs. In other words, the positive association between cognitive job security and the proportion of temporary workers should become even stronger with increasing protections against lay-offs for the permanent employees. Therefore, I hypothesize a positive interaction between dismissal protection and the proportion of temporary workers:

> Hypothesis 4: In countries with high levels of dismissal protection, a higher proportion of temporary workers will be associated with even greater cognitive job security.

Unemployment benefits and perceived job security

The compensation employees receive upon losing their jobs (i.e., unemployment benefits or social assistance) is another important element associated with the employment contract that differs among countries. In addition to income support after a job loss – which is a form of compensation granted in case of the employer's unilateral violation of the contract – laid-off workers also receive assistance in the form of counseling, training, or wage subsidies in finding new jobs.

Although generous welfare provisions do not reduce the power differential between the employee and the employer and thus do not decrease the probability of job loss, they can still contribute to feelings of job security. Both passive and active unemployment benefits can mitigate the negative consequences of dismissal, since they provide laid-off workers with safeguards to ensure their material well-being and enable them to find new employment. Workers who receive financial benefits (passive labor market policies) can afford to take the time to look for jobs that match their

needs and qualifications and should therefore be more confident of finding new jobs of comparable quality. Likewise, effective placement services or re-training programs (active labor market policies) should make employees more optimistic. Such associations between labor market policies and individual action and choices has already be shown in previous research (e.g., Anderson, 2009). Therefore, I hypothesize:

> Hypothesis 5: More generous levels of unemployment benefits are associated with greater perceived employment prospects.

Moreover, the generosity of unemployment benefits may affect not only perceived employment prospects, but also worry about job loss. Unemployment benefits reduce the costs of not having a job. Workers who receive unemployment benefits can sustain their material well-being without going to work. A vast body of literature in economics has consistently documented the negative relationship between the generosity of unemployment benefits and the duration of unemployment – mostly with the allegation that generous benefits make people lazy (Ehrenberg & Oaxaca, 1976; Fredriksson & Holmlund, 2006; Katz & Meyer, 1990; Lalive, 2007; van Ours & Vodopivec, 2006). In other words, if their material well-being is ensured, workers may not be anxious about losing their jobs. I therefore suggest that employees' levels of worry surrounding job loss should be inversely proportional to their prospective financial situation, i.e., the higher the actual dollar amount of the wage replacement rate and the longer the payment of benefits, the lower the level of worry among workers:

Hypothesis 6: More generous levels of unemployment benefits are associated with greater affective job security.

Relationships between the various facets of perceived job security

In addition to this direct association, unemployment benefits and affective job security may also be indirectly related. The relationship between unemployment benefits and affective job security may be mediated by confidence in keeping a job or quickly finding a new one. Knowing that unemployment will be only a transitional state which will lead to a new job of comparable quality, the amount and duration of benefits the worker will receive in case of lay-off may actually not be as important. Therefore, I hypothesize:

Hypothesis 7a: Higher levels of cognitive job security are associated with higher affective job security.

Likewise, if employees are confident of keeping their jobs, they do not need to worry about job loss, and their affective job security may therefore be only indirectly influenced by the amount of benefits they would receive in case of unemployment. Therefore, I hypothesize:

Hypothesis 7b: Higher levels of perceived employment prospects are associated with higher affective job security.

In sum, according to the general argument in the comparative political economy and welfare state research (Hall et al., 2001b in particular), which assumes a straightforward impact of regulations and policies on perceptions and behavior, I suggest that:

1) protection, which is best understood as an institution that reduces the power differential between the employee and the employer, will be associated with higher levels of cognitive job security and lower levels of perceived employment prospects;

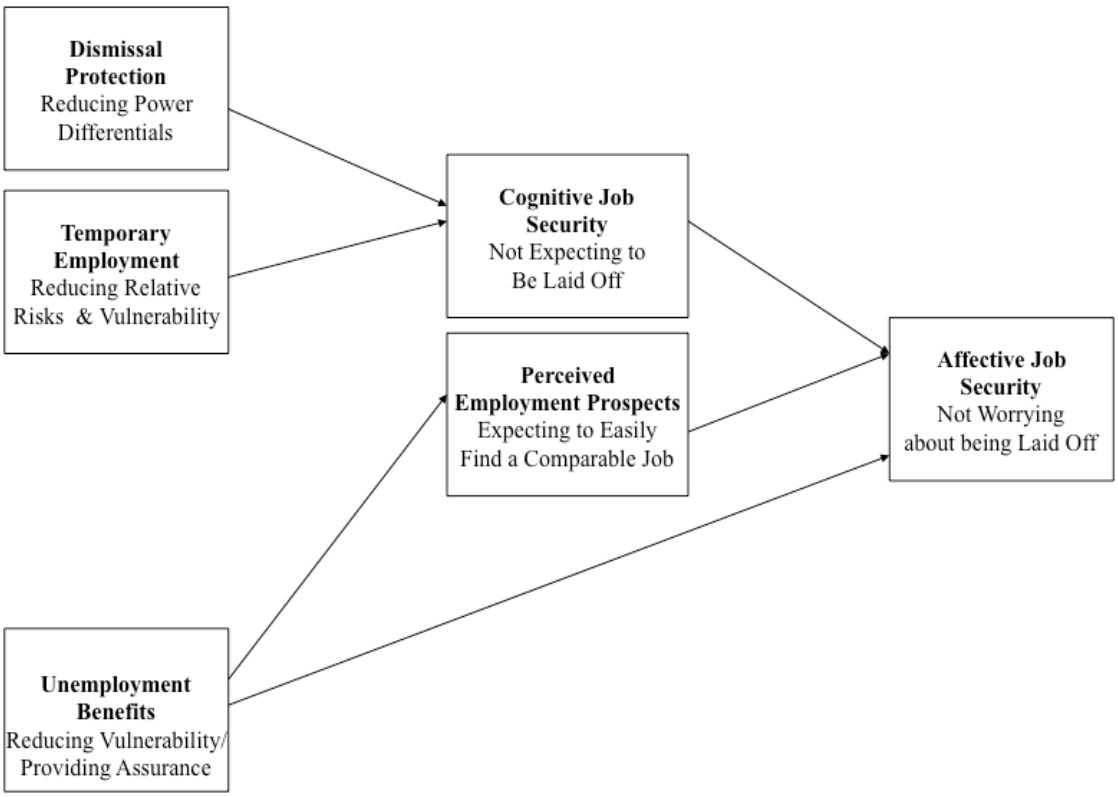
2) the proportion of temporary workers, which can be conceptualized as an institution that reduces relative risks and vulnerability, will also be associated with higher levels of cognitive job security, as it reinforces and highlights the protection of permanent in comparison with non-permanent employees;

3) unemployment benefits, which are best described as an institution that reduces the vulnerability of the employee in case of job loss, will be associated with higher levels of perceived employment prospects and affective job security; and

4) all three types of institutions should indirectly and positively be associated with affective job security (mediation through cognitive job security and perceived employment prospects).

Figure 4 depicts these expected relationships.

Figure 4: Expected Relationships between Labor Market Policies and Perceived Job Security



CHAPTER 5

MULTILEVEL ANALYSES OF SURVEY DATTA

The hypotheses in this paper are tested by applying multi-level modeling techniques to a data set that I created by combining individual-level data from the International Social Survey Program (ISSP) with country-level information from the Organization of Economic Cooperation and Development (OECD). The ISSP is an ongoing, collaborative survey of a wide array of countries, with annually changing survey topics. The 2005 wave was dedicated to individuals' "work orientations" and included questions on perceptions of job and employment security. The OECD regularly collects country-level information about the most important economic indicators, such as unemployment rates, social expenditures, and employment regulation, and standardizes the data to allow for international comparisons.

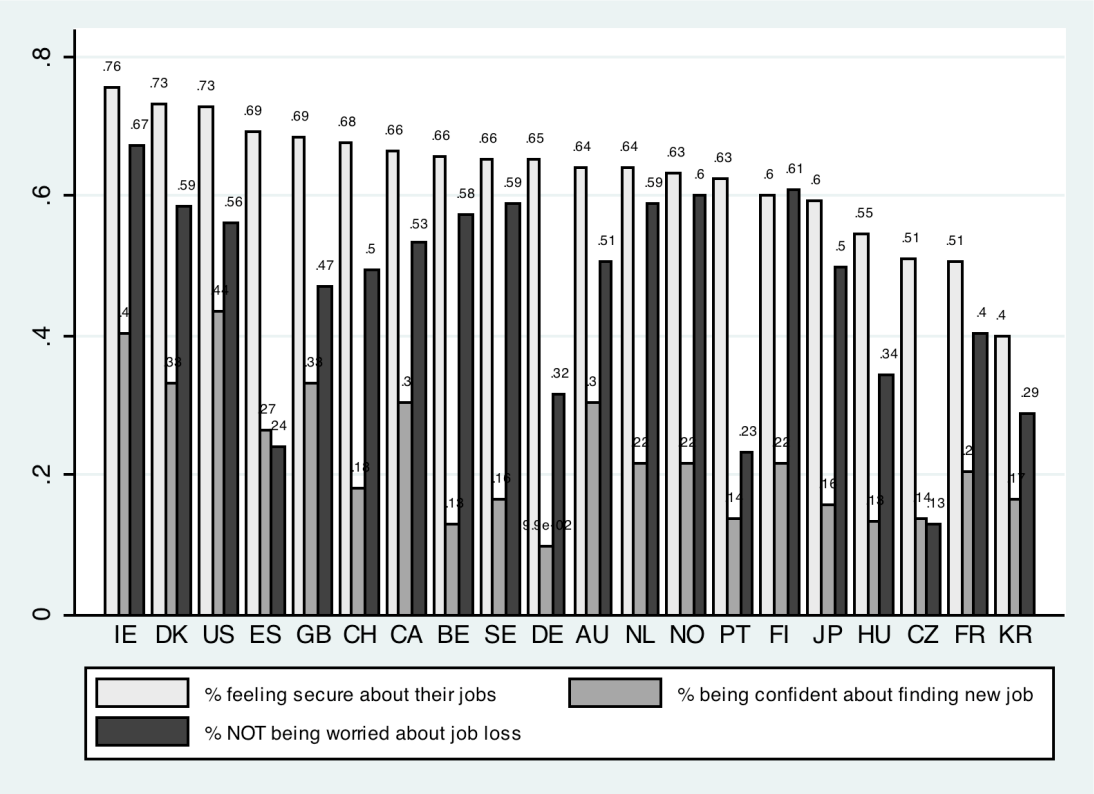
Data and Methods

Sample. By restricting the analyses to employees working at least part-time and to those countries for which macro-level indicators were available, the final sample yields a total of 12,583 observations in 20 countries: Australia, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Japan, the Netherlands, Norway, Portugal, South Korea, Spain, Sweden, Switzerland, the United Kingdom, and the United States. No variable used in the analyses has more than five percent missing data.

Dependent variables. The three dependent variables which capture confidence and positive expectations regarding future employment prospects are *cognitive job security*, *perceived employment prospects,* and *affective job security* and have been drawn from the ISSP. To assess cognitive job security, respondents were asked how much they agreed or disagreed with the statement that their jobs were "secure;" answer categories ranged from 1 ("strongly disagree") to 5 ("strongly agree"). To assess affective job security, respondents were asked to what extent they worried "about the possibility of losing [their] job;" answer categories ranged from 1 ("worry a great deal") to 4 ("don't worry at all"). To assess perceived employment prospects, respondents were asked to indicate how difficult or easy it would be for them to "find a job at least as good as [their] current one;" answer categories ranged from 1 ("very difficult") to 5 ("very easy").[6] Figure 5 shows the proportion of respondents with high and very high perceived job security by country, i.e., those who selected the two highest categories for the various questions.

[6] A sixth answer category, "can't choose," in the questions assessing cognitive job security and perceived labor market security was coded as missing data.

Figure 5: Weighted Proportions of Employees with High Levels of Perceived Job Security in Study Countries in 2005

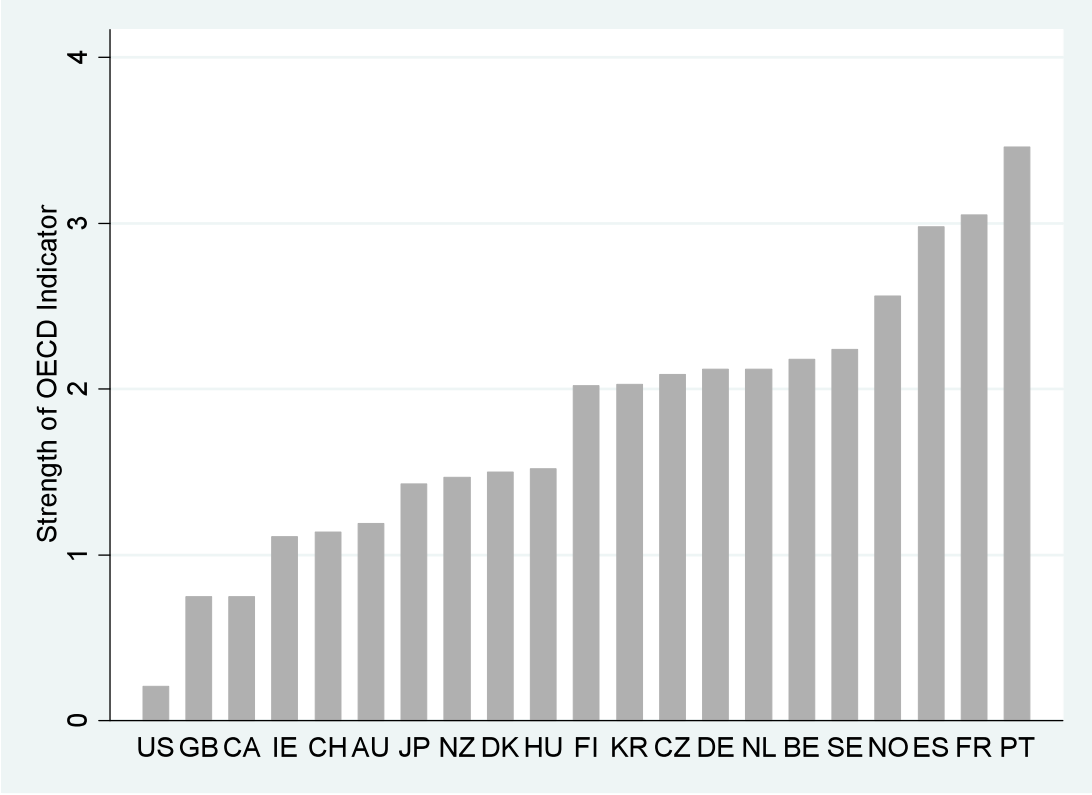


Note: IE (Ireland), DK (Denmark), US (United States), ES (Spain), GB (Great Britain), CH (Switzerland), CA (Canada), BE (Belgium), SE (Sweden), DE (Germany), AU (Australia), NL (The Netherlands), NO (Norway), PT (Portugal), FI (Finland), JP (Japan), HU (Hungary), CZ (Czech Republic), FR (France), KR (Korea), Source: OECD @ stats.oecd.org/index.aspx

This overview shows the variation that exists among the respondents in the various countries. While 74 percent of the employees in Ireland are confident that they will keep their jobs, those in South Korea tend to be pessimistic; only around 38 percent believe that their jobs are secure. For the other two facets of perceived job security, the variation across countries is similar if not greater. For example, 44 percent of the employees in the U.S. are confident that they will quickly find a job of comparable quality in case of lay-off, while not even ten percent of the workers in Germany exhibit equal optimism. Likewise, nearly 90 percent of the employees in Denmark, Belgium, and the U.S. are not worried about a potential job loss, whereas the proportion of non-worried workers in Spain is only around 53 percent.

Independent variables. The *strength of dismissal protection* captures the reduction in power differentials between the employee and the employer across countries. This is an OECD indicator, which includes the protection of individual workers against dismissal, special requirements for collective dismissals, and the regulation of temporary forms of employment. While the first two components consist mainly of legislative provisions, procedural inconveniences, notice, severance payments, and the definition of the conditions under which dismissal is considered ”fair“ or ”justified“, the last refers to national restrictions on the use of temporary employment (OECD, 2004: 65). Figure 6 shows the strength of the OECD dismissal protection indicator for my sample countries.

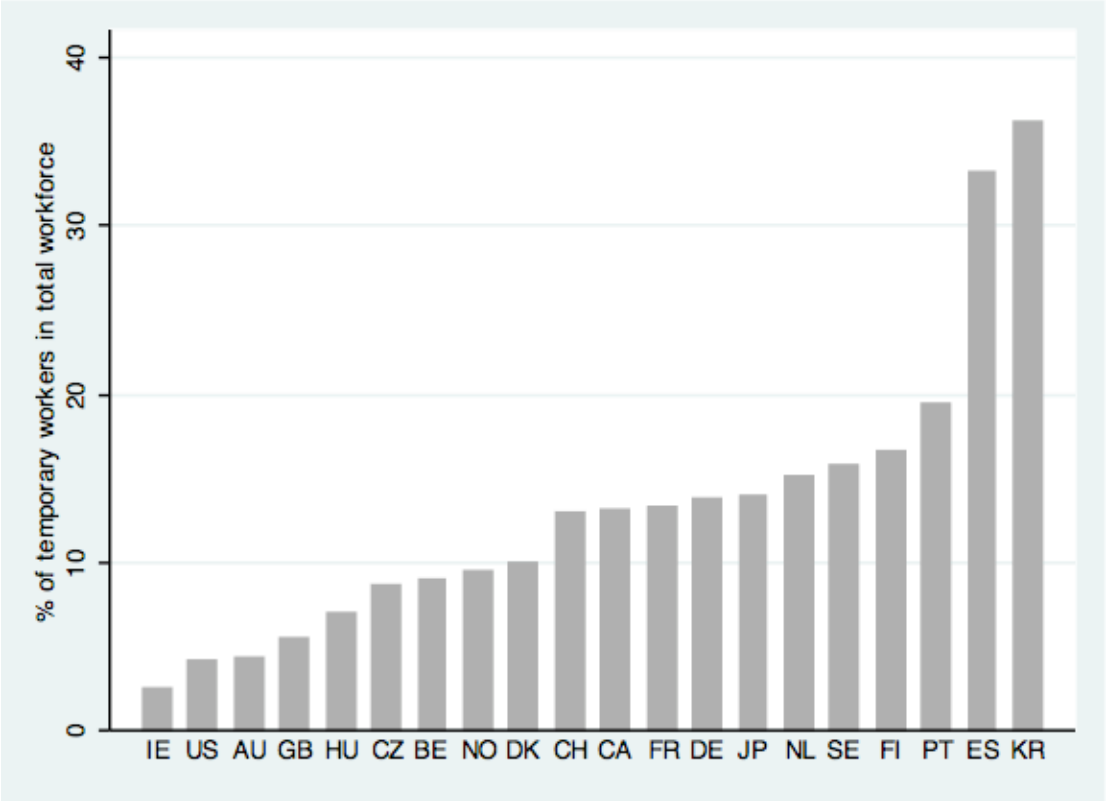
Figure 6: Strength of Dismissal Protection in Study Countries in 2005



Note: US (United States), GB (Great Britain), CA (Canada), IE (Ireland), CH (Switzerland), AU (Australia), JP (Japan), DK (Denmark), HU (Hungary), FI (Finland), KR (South Korea), CZ (Czech Republic), DE (Germany), NL (The Netherlands), BE (Belgium), SE (Sweden), NO (Norway), ES (Spain), FR (France), PT (Portugal), Source: OECD @ stats.oecd.org/index.aspx

The *proportion of temporary workers* in a country's total workforce captures the relative protection against job loss and relative vulnerability of permanent employees in comparison to temporary employees. The percentage of temporary workers ranges from 2.5 percent in Ireland to 36.1 in South Korea. This measure is also drawn from the OECD. Figure 7 shows the proportion of temporary workers in the total workforce for my sample countries.

Figure 7: Proportion of Temporary Workers in Study Countries in 2005

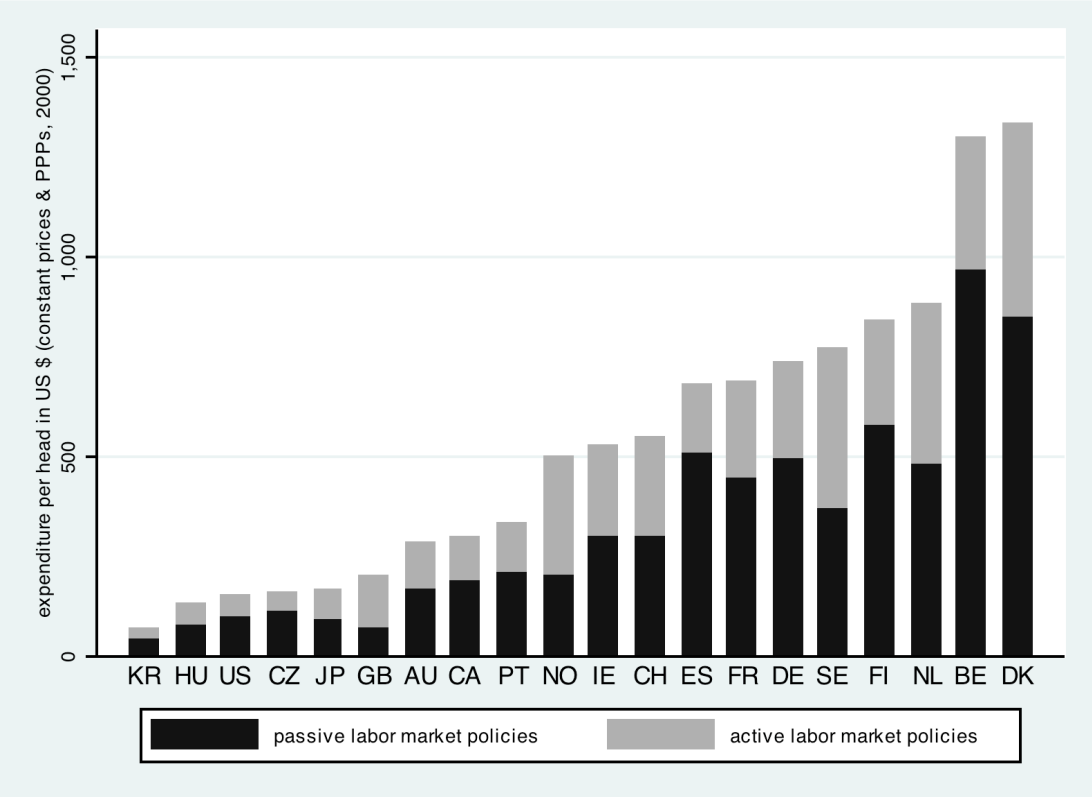


Note: IE (Ireland), US (United States), AU (Australia), GB (Great Britain), HU (Hungary), CZ (Czech Republic), BE (Belgium), NO (Norway), DK (Denmark), , CH (Switzerland), CA (Canada), FR (France), DE (Germany), JP (Japan), SE (Sweden), FI (Finland), PT (Portugal), ES (Spain), KR (South Korea), Source: OECD @ stats.oecd.org/index.aspx

The *generosity of unemployment benefits* captures the degree to which the employee's vulnerability is reduced in case of job loss. In this paper, unemployment

benefits are measured as the expenditure per head on a) passive labor market policies, i.e., the material assistance workers receive in case of lay-off, and b) active labor market policies, i.e., those government-provided services intended to increase the quality of the labor supply through training, job creation, and assistance in finding new jobs (in U.S. dollars, constant prices, and PPPs 2000). This measure is given in expenditure per head, i.e., the benefits per unemployed worker, and shown in Figure 8[7].

Figure 8: Spending on Unemployment in Study Countries in 2005



Note: KR (South Korea), HU (Hungary), US (United States), CZ (Czech Republic), JP (Japan), GB (Great Britain), AU (Australia), CA (Canada), PT (Portugal), NO (Norway), IE (Ireland), CH (Switzerland), ES (Spain), FR (France), DE (Germany), SE (Sweden), FI (Finland), NL (The Netherlands), BE (Belgium), DK (Denmark), Source: OECD @ stats.oecd.org/index.aspx

[7] By using the expenditure on unemployment benefits per unemployed person rather than the expenditure in percentage GDP (as other studies have done, e.g., Anderson and Pontusson, 2007 or Kittel and Obinger, 2003), my measure captures the actual generosity of the benefits, rather than a high number of unemployed or a low GDP.

Control variables. Because employees may still expect to lose their jobs despite strong dismissal protection, and because they may still not be confident about quickly finding new employment and worry about what will happen to them despite generous unemployment benefits, the analyses account for alternative explanations by including a number of control variables. At the individual level, these are gender, marital status/cohabitation, children, age, education, participation in training, use of skills at the current job, public sector employment, union membership, occupational status, reduced working hours, the quality of relationships with colleagues and management, and being in a supervisory position. At the country level, these are the standardized unemployment rates averaged over the last five years; positive labor market trends; and Hofstede's uncertainty avoidance indicator (2001), which assesses country-specific differences regarding emotional needs for formal rules, predictability, or regulated planning and organizations.[8] A detailed description of all the variables is provided in Table 3; the means, standard deviations, and correlations between all variables are displayed in Table 4.

[8] While more contextual factors could be relevant in explaining differences among countries, such as a measure of the openness of the national economy or growth rates, the available degrees of freedom on level 2 (N = 20) and therefore the use of contextual variables is fairly limited.

Table 3: Detailed Description of Study Variables

Variable Name	**Description**
Cognitive Job Security	For each of these statements about your (main) job, please tick one box to show how much you agree or disagree that it applies to your job. My job is secure. 1 – Strongly disagree to 5 – strongly agree
Affective Job Security	To what extent, if at all, do you worry about the possibility of losing your job? 1 –I worry a great deal to 4 – I don't worry at all
Perceived Employment Security	How difficult or easy do you think it would be for you to find a job at least as good as your current one? 1 – very difficult to 5 – very easy
Gender	1 – being female 0 – otherwise
Single	1 – being single 0 – being married or living with partner
Young	1 – being ≤ 30 years 0 – otherwise
Old	1 – ≥ 50 years
Degree	1 – no formal qualification 2 – lowest formal qualification 3 – above lowest qualification 4 – higher secondary completed 5 – above higher secondary level 6 – university degree completed
Occupation	Four dummy variables based on ISCO88 classification - Managers and Professionals - Service Workers (reference category) - Manual Workers - Elementary Occupations
Work Time	1 – employed-full time 2 – employed-part time 3 – employed < part-time
Union Member	1 – being a union member 0 – otherwise
Supervisory Position	1 – being in a supervisory position 0 – otherwise
Participation in Training	1 – received training to improve job skills over past 12 months 0 – otherwise

Use of Skills	1 – almost no use of past work experience and skills 2 – a little use of past work experience and skills 3 – a lot use of past work experience and skills 4 – almost all use of past work experience and skills
Relations with Management	1 – relations between management and employees are very bad 2 – relations between management and employees are bad 3 – relations between management and employees are neither good nor bad 4 – relations between management and employees are good 5 – relations between management and employees are very good
Relations with Colleagues	1 – relations between colleagues/workmates are very bad 2 – relations between colleagues/workmates are bad 3 – relations between colleagues/workmates are neither nor 4 – relations between colleagues/workmates are good 5 – relations between colleagues/workmates are very good
Ø Unempl. Rate	Average of harmonized unemployment rates from 2000 to 2005 Source: OECD at http://stats.oecd.org/Index.aspx
Decrease in Unemployment Rates	1 – decrease in unemployment rates from 2004 to 2005 0 – increase in/stagnation of unemployment rates from 2004 to 2005
Spending on Unemployment	Expenditure on active and passive labor market policies, in expenditure per head in US dollars (constant prices and PPPs, 2000) Source: http://stats.oecd.org/Index.aspx
Dismissal Protection	OECD provided indicator encompassing the protection of individual workers against dismissal and special requirements for collective dismissals, as well as the regulation of temporary forms of employment. While the first two components consist mainly of legislative provisions, procedural inconveniences, notice, severance payments, and definition of the conditions under which dismissal is considered "fair" or "justified;" the last refers to national restrictions on the use of temporary employment Source: http://stats.oecd.org/Index.aspx .
Uncertainty Avoidance	A survey-based indicator capturing the extent to which ambiguous situations are perceived as threats, rules or orders are preferred, and uncertainty is tolerated within a society; higher scores indicate greater uncertainty avoidance Source: http://www.geert-hofstede.com/hofstede_dimensions.php .
Proportion of Temporary Workers	Proportion of temporary employment at total employed workforce Source: http://stats.oecd.org/Index.aspx

Table 4: Means, Standard Deviations, and Correlations among Study Variables

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1 Cognitive Job Security	3.6	1.1	1.00																									
2 Affective Job Security	2.6	1.1	0.05	1.00																								
3 Perceived Employability	3.2	0.9	0.41	0.17	1.00																							
4 Female	0.5	0.5	0.02	-0.02	-0.01	1.00																						
5 Single	0.4	0.5	-0.03	0.07	-0.02	0.05	1.00																					
6 Children	0.4	0.5	0.00	0.04	-0.01	0.02	-0.28	1.00																				
7 ≤ 30 years	0.2	0.4	-0.00	0.12	0.00	0.04	0.32	-0.13	1.00																			
8 ≥ 50 years	0.3	0.4	0.03	-0.15	0.04	-0.04	-0.13	-0.33	-0.29	1.00																		
9 Degree	4.2	1.4	0.06	0.09	0.16	0.03	0.02	0.00	0.04	-0.08	1.00																	
10 Participation in Training	0.5	0.5	0.12	0.05	0.13	0.04	0.02	0.02	0.04	-0.06	0.28	1.00																
11 Use of Skills	2.9	1.0	0.10	0.05	0.13	-0.02	-0.05	-0.02	-0.11	0.08	0.18	0.15	1.00															
12 Public Servant	0.2	0.4	0.15	-0.04	0.12	0.15	-0.04	0.01	-0.06	0.06	0.18	0.17	0.07	1.00														
13 Union Membership	0.3	0.5	0.08	-0.04	0.07	0.00	-0.08	-0.00	-0.10	0.07	0.07	0.12	0.06	0.29	1.00													
14 Managers and Professionals	0.5	0.5	0.08	0.02	0.12	0.02	-0.03	0.01	-0.06	0.01	0.50	0.23	0.24	0.14	0.03	1.00												
15 Manual and Agricultural Workers	0.2	0.4	-0.07	-0.01	-0.09	-0.31	-0.03	0.00	-0.00	0.01	-0.33	-0.16	-0.09	-0.20	0.01	-0.46	1.00											
16 Elementary Occupations	0.1	0.2	-0.03	0.00	-0.07	0.02	0.01	-0.02	-0.02	0.04	-0.21	-0.13	-0.15	-0.02	-0.04	-0.23	-0.13	1.00										
17 Reduced working hours	1.2	0.4	-0.04	0.02	0.05	0.26	0.02	0.04	-0.01	0.04	-0.02	-0.04	-0.05	0.03	-0.08	-0.06	-0.13	0.07	1.00									
18 Relationships with Management	3.8	0.9	0.17	-0.00	0.15	0.01	-0.01	-0.01	0.00	0.04	-0.01	0.04	0.11	-0.05	-0.10	0.04	-0.04	-0.00	0.06	1.00								
19 Relationships with Colleagues	4.2	0.8	0.12	0.01	0.14	0.02	0.02	-0.01	0.04	0.01	0.04	0.06	0.09	0.00	-0.02	0.06	-0.04	-0.03	0.06	0.52	1.00							
20 Supervisory Position	0.3	0.5	0.08	0.03	0.08	-0.17	-0.07	0.03	-0.11	0.04	0.18	0.14	0.19	-0.02	-0.03	0.26	-0.10	-0.11	-0.12	0.08	0.05	1.00						
21 Average Unemployment ('00-'05)	6.2	1.9	-0.03	-0.04	-0.12	0.00	-0.07	0.02	0.03	-0.05	-0.13	-0.09	-0.06	-0.06	-0.05	-0.06	0.04	-0.00	-0.07	-0.10	-0.12	-0.04	1.00					
22 Decrease in Unemployment	0.5	0.5	0.06	0.13	0.06	-0.00	-0.04	-0.02	-0.02	0.05	0.15	0.07	0.01	-0.01	0.03	-0.02	-0.00	0.02	-0.00	0.00	-0.04	-0.01	0.10	1.00				
23 Uncertainty Avoidance	61.8	24.0	-0.09	-0.14	-0.20	-0.00	0.00	0.03	0.07	-0.07	-0.20	-0.19	-0.21	-0.12	-0.27	-0.11	0.08	0.05	-0.06	-0.05	-0.11	-0.11	0.35	-0.34	1.00			
24 Dismissal Protection	1.9	0.9	-0.07	-0.12	-0.15	0.02	-0.01	0.05	0.03	-0.06	-0.22	-0.17	-0.11	-0.01	0.02	-0.05	0.04	0.00	-0.08	-0.06	-0.06	-0.08	0.37	-0.52	0.61	1.00		
25 % of Temporary Employment	12.6	7.9	-0.06	-0.07	-0.15	-0.05	0.00	0.04	0.05	-0.05	-0.13	-0.13	-0.11	-0.07	-0.05	-0.06	0.03	0.02	-0.05	-0.02	-0.07	-0.05	0.20	-0.27	0.47	0.55	1.00	
26 Unemployment Benefits	544.1	369.4	0.06	0.02	0.12	-0.01	0.02	0.03	-0.01	-0.00	0.00	0.06	0.07	0.11	0.34	0.06	-0.05	-0.05	0.01	-0.03	0.01	0.02	0.21	-0.10	-0.22	0.26	0.01	1.00

N = 12,583

Analyses

Because the analyses seek to examine differences across countries and to combine individual-level with national-level data, I utilize multilevel models. Ignoring the nested structure of the data would lead to underestimated standard errors and erroneous conclusions about the statistical significance of relationships between the study variables (Rabe-Hesketh & Skrondal, 2005). I chose to estimate linear coefficient models for all three dependent variables using the maximum likelihood estimator (ML)[9]. The model takes the following form:

$$Y_{ij} = \beta_0 + \sum_k \beta_{k0} X_{ij} + \sum_k \beta_{0k} Z_j + u_{0j} + e_{ij} \text{ , where}$$

Y_{ij}	captures perceived job/employment security for individual i in country j
X_{ij}	is the individual level characteristics for the individual i in country j
Z_j	is the country level characteristics for country j
$ß_0$	is the overall intercept
$ß_k$	is the fixed individual-level parameters
$ß_k$	is the fixed country-level parameters
u_{0j}	is the country-specific deviation from the overall intercept
ε_{ij}	is the residual for the i^{th} individual in country j.

Robustness Checks

To check the robustness of the results of the random intercept models, I also conducted analyses using clustered regression models and random coefficient models

[9] Using ML allows me to compare the model fit based on the χ^2-test of deviances (which is not always the case for models based on the restricted likelihood estimator). Stata's 'xtmixed' command is used to estimate these models (version 11).

with age, gender, and education as random effects.[10] The results of these analyses, which are presented in the Appendix, do yield similar results for all the individual and country-level predictors used in this paper, i.e., differences in the size of the coefficients and their level of statistical significance, but no differences in the signs of the coefficients were detected.

To test for multicollinearity, I ran an OLS regression on country-level averages with only macro-level variables as predictors but did not find any indication of a problem when examining the variance inflation factors associated with these models (no values higher than 2.85).

To ensure that the results are not driven by those countries with a high number of observations (the ISSP data are unbalanced, i.e., the number of observations among countries varies between 431 and 1,076), I compare the results based on the maximum likelihood estimator to those based on the restricted maximum likelihood estimator (REML). The results between the two estimation methods do not differ substantially, i.e., slight differences in the size of some of the coefficients and level of significances but no changes in the signs of the coefficients nor in the statistical significances (results available upon request).[11]

To check that the results are not driven by a single group of countries, e.g., Eastern Europe, I also conducted analyses without these countries. Here again, the

[10] Comparative labor market research has shown that age, gender, and education are associated with different income levels and unemployment risks in different countries (Esping-Andersen & Regini, 2000; Lindbeck & Snower, 2001). Other individual level variables are not considered random effects because of the limited degrees of freedom due to a small country-level N of 20.

[11] While REML and ML produce the same results when using balanced data, their estimators can differ when using unbalanced data, since the REML estimates for the random intercept variance take the loss of one degree of freedom into account because an overall mean is estimated, while ML does not. A variance component model using ML, in contrast, produces a weighted mean of the clustered mean, i.e., gives more weight to groups with fewer observations.

results did not differ substantially from those I obtained using the full sample (i.e., 20 countries instead of only 18). The results of these analyses based on subgroups of countries are also available upon request.

Results

Table 5 presents the results of the analyses with individual-level predictors only. Tables 6 to 9 summarize the analyses of each of the three dependent variables. The first model in each table includes only the intercept. Based on this empty model, I calculate the intra-class correlation ρ (ICC), which indicates how much of the variance in the dependent variable is due to differences between individuals as opposed to differences between countries.[12] The second column in each table (Model 2) presents the model with all control variables on the individual and country-level. The predicting variables for the hypothesized relationships are introduced sequentially. The evidence for and against each hypothesis is discussed separately for each of the three dependent variables.

Individual-level characteristics and perceived job security

Table 5 displays the results of the analyses for cognitive job security (Column 1), perceived employment prospects (Column 2), and affective job security (Column 3). Looking at the demographic characteristics, we observe that gender (1 being female) has a negative association with perceived employment prospects and affective job security ($\alpha < 0.01$) and that being single has a negative association with cognitive and affective job security ($\alpha < 0.05$) but a positive association with perceived employment prospects ($\alpha < 0.05$). We also observe considerable differences between

[12] The ICC is calculated by dividing the variance at the country level (u^2) by the total variance, i.e., the sum of the country-level variance and the residual variance ($u^2 + \varepsilon_i^2$).

the different age groups. Young workers (< = 30 years) not only tend to be more optimistic about keeping their jobs and quickly finding new ones in case of unemployment, but also tend to be less worried about job loss than their older counterparts ($\alpha < 0.01/0.001$). Older workers (>= 50 years), in contrast, exhibit lower levels of perceived employment prospects ($\alpha < 0.001$) but also tend to be less worried ($\alpha < 0.05$) about job loss than those between 31 and 49 years (reference category).

Turning to education, we again observe that the three facets of perceived job security are not affected equally by all of the independent variables. Higher levels of education are not associated with greater cognitive job security but do have a positive and statistically significant association with both perceived employment prospects ($\alpha < 0.01$) and affective job security ($\alpha < 0.001$). Participation in training during the last 12 months is positively associated with cognitive and affective job security ($\alpha < 0.001$) but (somewhat surprisingly) not with perceived employment prospects. One reason for this lack of statistical significance may be that at least some of the employees' training is firm-specific and therefore of use only for their current position but not for jobs outside their organization. This suspicion is backed up by the fact that using one's skills and qualifications in the current job is positively associated with all three dependent variables ($\alpha < 0.001$).

Public sector employees and union members tend to be relatively more confident about keeping their jobs (positive coefficient for cognitive job security, $\alpha < 0.001$) but less optimistic about quickly finding a new job of comparable quality in case of job loss (negative coefficient for perceived employment prospects, $\alpha < 0.001$). While public service sector employees are not worried about losing their jobs (positive coefficient for affective job security, $\alpha < 0.001$), union members tend to be anxious about this prospect (negative coefficient for affective job security, $\alpha < 0.001$).

Occupational membership also affects individuals' perceptions of job security. Workers in manufacturing and agricultural jobs are not only less confident about keeping their jobs (negative coefficient for cognitive job security, $\alpha < 0.05$) but also more worried about job loss (negative coefficient for affective job security, $\alpha < 0.01$) than service workers (reference category). The general decline in jobs in the manufacturing and agricultural sectors, as well as the relocation of manual jobs to low-wage countries, may cause these workers' pessimistic view of their future employment chances. Workers in elementary occupations[13], in contrast, tend to be more optimistic about finding a new job than service workers (positive coefficient for perceived employment prospects, $\alpha < 0.001$) but worry more about job loss (negative coefficient for affective job security, $\alpha < 0.001$), probably because their dependence on a steady income is high, given the low wages they earn.

The actual working situation also seems to matter for workers' confidence about their future job situation. Working fewer hours (1=full time, 2=substantial part-time, and 3= marginal part-time) are associated with lower levels of cognitive job security ($\alpha < 0.001$) but also with greater perceived employment prospects and greater affective job security ($\alpha < 0.01$). Part-time workers may perceive themselves as easier to replace than full-time workers, but since they are often not the main breadwinners in the household, they are also less dependent on their jobs and hence less worried. In addition, they may also have lower expectations vis-à-vis their work, which can explain why they are more optimistic about finding a job of similar quality. Being in a supervisory position and having good relationships with management and colleagues do not affect workers' perceived employment prospects, whereas both of these

[13] These are occupations that require the knowledge and skills to perform only very simple, routine tasks and limited personal initiative or judgment, e.g., selling goods on the street, doorkeeping and property watching, cleaning, or laboring in mining, agriculture and fishing, construction and manufacturing (IL0 1990).

variables have a positive association with cognitive job security ($\alpha < 0.001$) and affective job security ($\alpha < 0.001$).

able 5: Random Intercept Models on Perceived Job Security

	Cognitive Job Security		**Perceived Employment Prospects**		**Affective Job Security**	
	beta	se	beta	se	beta	se
Intercept	2.566***	(0.08)	2.356***	(0.01)	2.174***	(0.08)
Female	0.019	(0.02)	-0.060**	(0.02)	-0.046**	(0.02)
Single	-0.071**	(0.02)	0.067**	(0.02)	-0.065***	(0.02)
Children	0.016	(0.02)	0.039†	(0.02)	-0.022	(0.02)
≤ 30 years	0.086**	(0.03)	0.231***	(0.03)	0.076***	(0.02)
≥ 50 years	0.041†	(0.03)	-0.328***	(0.03)	0.042*	(0.02)
Degree	-0.005	(0.01)	0.029**	(0.01)	0.026***	(0.01)
Training	0.150***	(0.02)	0.021	(0.02)	0.058***	(0.02)
Use of Skills	0.048***	(0.01)	0.066***	(0.01)	0.043***	(0.01)
Public Servant	0.354***	(0.03)	-0.132***	(0.03)	0.133***	(0.02)
Union Member	0.101***	(0.02)	-0.133***	(0.02)	-0.046*	(0.02)
Managers and Professionals	0.012	(0.03)	-0.026	(0.03)	-0.001	(0.02)
Manual and Agricultural Workers	-0.073*	(0.03)	0.045†	(0.03)	-0.063**	(0.02)
Elementary Occupations	-0.069†	(0.04)	0.126**	(0.04)	-0.136***	(0.03)
Reduced working hours	-0.115***	(0.02)	0.082***	(0.02)	0.067***	(0.02)
Supervisory Position	0.101***	(0.02)	0.034†	(0.02)	0.063***	(0.02)
Relations with Management	0.179***	(0.01)	-0.016	(0.01)	0.112***	(0.01)
Relations with Colleagues	0.044**	(0.01)	-0.005	(0.01)	0.063***	(0.01)
Random Part						
√e (Level 1)	1.069		1076		0.847	
√u (Level 2)	0.131		0.18		0.224	
Model Fit						
R^2 (Level1)	0.068		0.046		0.05	
R^2 (Level2)	0.321		0.008		0.295	
Deviance	37431.772		37655.021		31596.931	

*Note: The significant coefficients are marked with † for p < 0.1, * for p < 0.05,** p < 0.01, and *** p < 0.001.*
The Group variable is country code. Since the variable "public sector employment" is not available for the U.S., I tested whether the exclusion of the U.S. yielded different results. Since this was not the case, I included the U.S. in all of the following analyses.
N (Level 1) = 12,583
N (Level 2) = 20

In sum, the individual-level variables do not yield any surprising associations with any of the dependent variables and are in line with what previous studies have shown (Anderson et al., 2007; Ashford et al., 1989; Bender et al., 1999; De Witte, 2005; Sverke et al., 2002).

Dismissal protection, temporary workers, and cognitive job security

Table 6 displays the findings on cognitive job security, i.e., individuals' confidence in keeping their jobs. The low intraclass correlation coefficient of 0.023 as shown in Model 1 suggests that dismissal protection – along with other contextual factors – has only a slight impact on employees' cognitive job security. Only 2.3 percent of the variance in cognitive job security can be explained by differences between countries. Put differently, the correlation of cognitive job security between two randomly selected individuals in the same country is only 0.023, even though their working conditions are determined by the same economic environment and their employment contracts are based on the same labor market regulations. This initial finding provides very little evidence for the presumption that differences in skill-formation systems and national business strategies can be attributed to institutional variations.

Table 6: Random Intercept Models on Cognitive Job Security

	Cognitive Job Security									
	Model 1		**Model 2**		**Model 3**		**Model 4**		**Model 5**	
	beta	se	beta	se	beta	se	beta	se	beta	se
Fixed Part										
Intercept	3.636***	(0.04)	2.468***	(0.14)	2.476***	(0.14)	2.477***	(0.14)	2.821***	(0.14)
Level 1										
Female			0.019	(0.02)	0.019	(0.02)	0.019	(0.02)	0.019	(0.02)
Single			-0.070**	(0.02)	-0.070**	(0.02)	-0.070**	(0.02)	-0.070**	(0.02)
Children			0.016	(0.02)	0.016	(0.02)	0.016	(0.02)	0.016	(0.02)
≤ 30 years			0.086**	(0.03)	0.086**	(0.03)	0.086**	(0.03)	0.084**	(0.03)
≥ 50 years			0.041†	(0.03)	0.041†	(0.03)	0.041†	(0.03)	0.043†	(0.03)
Degree			-0.006	(0.01)	-0.007	(0.01)	-0.007	(0.01)	-0.006	(0.01)
Training			0.149***	(0.02)	0.148***	(0.02)	0.148***	(0.02)	0.147***	(0.02)
Use of Skills			0.049***	(0.01)	0.048***	(0.01)	0.048***	(0.01)	0.049***	(0.01)
Public Servant			0.354***	(0.03)	0.354***	(0.03)	0.354***	(0.03)	0.350***	(0.03)
Union Member			0.096***	(0.02)	0.097***	(0.02)	0.097***	(0.02)	0.100***	(0.02)
Managers and Professionals			0.013	(0.03)	0.013	(0.03)	0.013	(0.03)	0.012	(0.03)
Manual and Agricultural Workers			-0.072*	(0.03)	-0.073*	(0.03)	-0.073*	(0.03)	-0.073*	(0.03)
Elementary Occupations			-0.068†	(0.04)	-0.068†	(0.04)	-0.068†	(0.04)	-0.071†	(0.04)
Reduced working hours			-0.116***	(0.02)	-0.117***	(0.02)	-0.117***	(0.02)	-0.117***	(0.02)
Supervisory Position			0.102***	(0.02)	0.101***	(0.02)	0.101***	(0.02)	0.101***	(0.02)
Relations with Management			0.179***	(0.01)	0.179***	(0.01)	0.179***	(0.01)	0.179***	(0.01)
Relations with Colleagues			0.045**	(0.01)	0.045**	(0.01)	0.045**	(0.01)	0.045**	(0.01)
Level 2										
Unempl. 2000-2005			-0.006	(0.02)	0.000	(0.02)	0.000	(0.02)	-0.006	(0.01)
Decrease in Unemployment			0.131*	(0.06)	0.097†	(0.06)	0.098†	(0.06)	0.047	(0.05)
Uncertainty Avoidance			0.000	(0.00)	0.002	(0.00)	0.002	(0.00)	0.002†	(0.00)
Unemployment Benefits			0.000	(0.00)	0.000†	(0.00)	0.000†	(0.00)	0.000***	(0.00)
Dismissal Protection					-0.068	(0.05)	-0.064	(0.05)	-0.251***	(0.06)
% of Temporary Employment							-0.001	(0.00)	-0.031***	(0.01)
DP*Temp									0.014***	(0.00)
Random Part										
√e (Level 1)	1.108		1.069		1.069		1.069		1.069	
√u (Level 2)	0.159		0.112		0.105		0.105		0.072	
Model Fit										
R^2 (Level1)			0.068		0.068		0.068		0.068	
R^2 (Level2)			0.508		0.564		0.565		0.795	
Deviance	38330.476		37431.881		37429.947		37429.895		37418.004	
rho	0.023									

*Note: The significant coefficients are marked with † for p < 0.1, * for p < 0.05,** p < 0.01, and *** p < 0.001.*
The group variable is country code.
To compare the model fit, χ^2–tests deviance (=-2LogDeviance) were conducted[14]. These tests indicate that Model 2 fits the data better than Mode1 (p < 0.001) and that Model 5 fits the data better than Model 4 (p<0.001).
N (Level 1) = 12,583
N (Level 2) = 20

Model 2 includes all individual and macro-level control variables. The only statistically significant variable on the country level is the decrease in unemployment.

[14] Smaller deviances indicate better model fit. The χ^2–value is calculated on the difference between the deviances of two models; the degrees of freedom are the differences in the number of parameters between the models.

Declining unemployment rates thus seem to make workers more optimistic about keeping their jobs. In Models 3 to 5, Hypotheses 1, 3, and 4 are tested. Hypothesis 1, which posits that higher levels of dismissal protection will be associated with higher levels of cognitive job security, is not confirmed (Model 3). The relationship between strength of dismissal protection and cognitive job security is statistically insignificant. There is likewise no statistically significant relationship between the proportion of temporary workers and cognitive job security (Model 4), as suggested by Hypothesis 3. Hypothesis 4, however, which predicts that the joint effect of stringent dismissal protection and a high proportion of temporary workers will yield even higher levels of cognitive job security, is confirmed (Model 5).[15] The coefficients of dismissal protection and the proportion of temporary workers are negative, while the coefficient of their interaction term is positive.

In substantive terms, this means that stringent dismissal protection is likely to exhibit its protective psychological effects only in those countries with a high proportion of temporary workers. This effect is depicted graphically in Figures 9a and 9b. Figure 9a shows the slopes of the interaction term; Figure 9b shows the relationship between dismissal protection and cognitive job security when the proportion of temporary workers is below (left side) and above (right side) the sample mean. Only in their joint presence do stringent dismissal protection and the presence of temporary workers have a statistically significant effect. In tandem, they make employees confident of keeping their jobs.

[15] In order to determine the "practical relevance" of this result, I also examined the effect size of the standardized coefficients. The standardized coefficient of the interaction term between the strength of dismissal protection and the proportion of temporary workers is 0.089 and is thus the third highest coefficient in the analyses. Only the 'public service employment' (0.126) and 'relations with management' are higher. The fourth most important predictor is 'uncertainty avoidance' (0.072), and the fifth most important 'participation in training'. The standardized coefficients for all of the analyses are presented in the Appendix.

Figure 9a: Interaction Effect between Strength of Dismissal Protection and Proportion of Temporary Workers for Cognitive Job Security

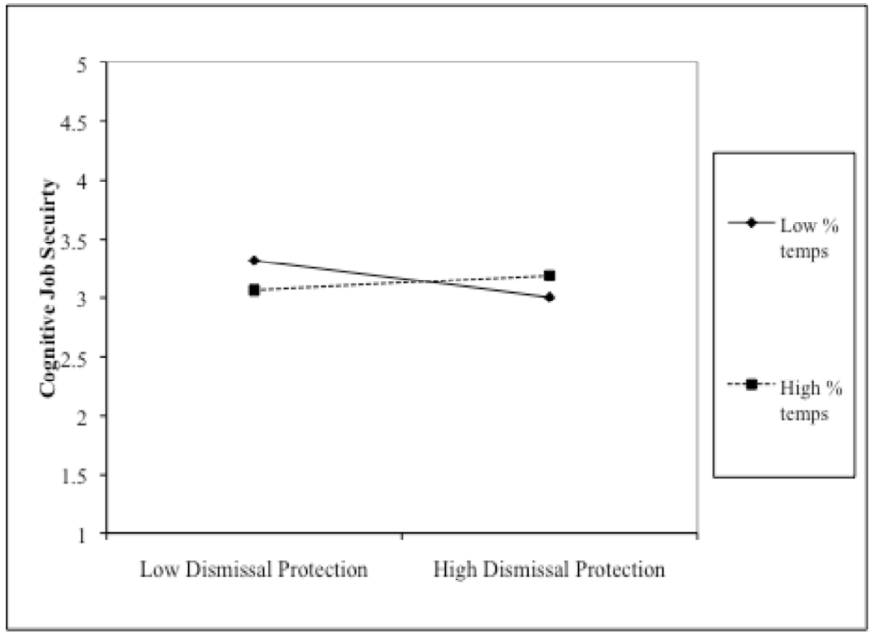
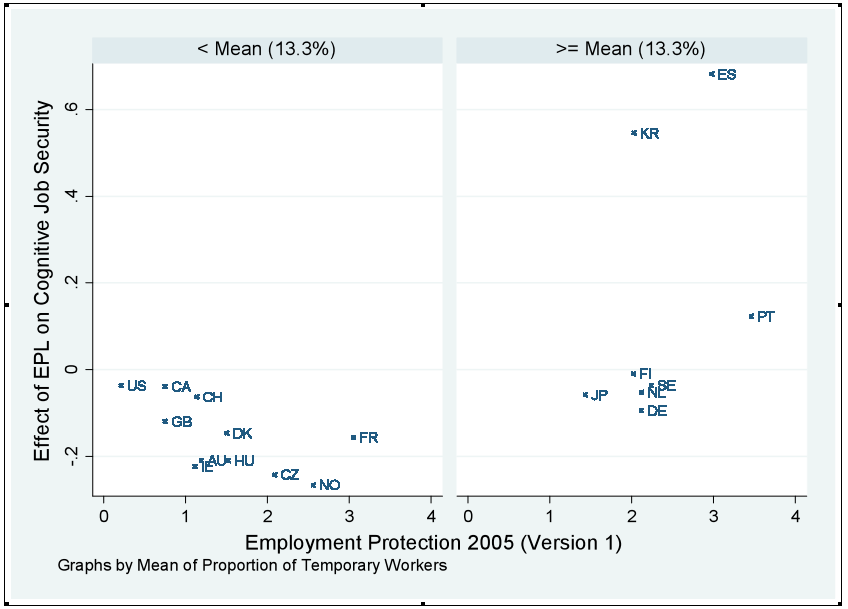


Figure 9b: Association between Strength of Dismissal Protection and Cognitive Job Security by Proportion of Temporary Workers



To ensure that these results are not skewed by those countries with very high proportions of individuals working on temporary contracts, I also ran additional analyses which excluded the two countries with the highest proportion of employees working on temporary contracts, South Korea, with 36.12 percent temporary workers and Spain, with 33.26 percent. The exclusion of these two countries, however, changes only the magnitude but not the sign and the statistical significance of the coefficient of the interaction term, as shown in Table 7 below (the slight decrease in statistical significance from $p < 0.05$ to $p = 0.06$ is likely to be due to the reduction in the degrees of freedom by having a smaller number of observations at the country level).

Table 7: Random Intercept Models on Cognitive Job Security without Spain and South Korea

	Cognitive Job Security											
	Model 1		**Model 2**		**Model 3**		**Model 4**		**Model 5**		**Model 6**	
	beta	se	beta	se	beta	se	beta	se	beta	se	beta	se
Fixed Part												
Intercept	3.649***	(0.03)	2.543***	(0.08)	2.615***	(0.14)	2.656***	(0.13)	2.664***	(0.13)	2.783***	(0.14)
Level 1												
Female			0.020	(0.02)	0.020	(0.02)	0.022	(0.02)	0.021	(0.02)	0.021	(0.02)
Single			-0.066**	(0.02)	-0.067**	(0.02)	-0.068**	(0.02)	-0.068**	(0.02)	-0.068**	(0.02)
Children			0.024	(0.02)	0.023	(0.02)	0.024	(0.02)	0.024	(0.02)	0.024	(0.02)
≤ 30 years			0.109***	(0.03)	0.110***	(0.03)	0.110***	(0.03)	0.110***	(0.03)	0.109***	(0.03)
≥ 50 years			0.062*	(0.03)	0.060*	(0.03)	0.060*	(0.03)	0.061*	(0.03)	0.062*	(0.03)
Degree			-0.003	(0.01)	-0.004	(0.01)	-0.005	(0.01)	-0.005	(0.01)	-0.005	(0.01)
Training			0.147***	(0.02)	0.147***	(0.02)	0.144***	(0.02)	0.144***	(0.02)	0.143***	(0.02)
Use of Skills			0.045***	(0.01)	0.045***	(0.01)	0.045***	(0.01)	0.045***	(0.01)	0.045***	(0.01)
Public Servant			0.114***	(0.02)	0.114***	(0.02)	0.114***	(0.02)	0.113***	(0.02)	0.113***	(0.02)
Union Member			0.341***	(0.03)	0.340***	(0.03)	0.340***	(0.03)	0.340***	(0.03)	0.338***	(0.03)
Managers and Professionals			0.097***	(0.02)	0.094***	(0.02)	0.096***	(0.02)	0.096***	(0.02)	0.097***	(0.02)
Manual and Agricultural Workers			0.009	(0.03)	0.010	(0.03)	0.010	(0.03)	0.010	(0.03)	0.009	(0.03)
Elementary Occupations			-0.084**	(0.03)	-0.084**	(0.03)	-0.084**	(0.03)	-0.084**	(0.03)	-0.085**	(0.03)
Reduced working hours			-0.045	(0.05)	-0.045	(0.05)	-0.046	(0.05)	-0.046	(0.05)	-0.048	(0.05)
Supervisory Position			-0.090***	(0.02)	-0.091***	(0.02)	-0.095***	(0.02)	-0.094***	(0.02)	-0.094***	(0.02)
Relations with Management			0.178***	(0.01)	0.178***	(0.01)	0.178***	(0.01)	0.179***	(0.01)	0.178***	(0.01)
Relations with Colleagues			0.040**	(0.02)	0.039**	(0.02)	0.040**	(0.02)	0.040**	(0.02)	0.040**	(0.02)
Level 2												
Unempl. 2000-2005					-0.025†	(0.01)	-0.019†	(0.01)	-0.019†	(0.01)	-0.016	(0.01)
Decrease in Unemployment					0.080†	(0.05)	0.022	(0.05)	0.021	(0.05)	0.016	(0.05)
Uncertainty Avoidance					0.000	(0.00)	0.002†	(0.00)	0.002†	(0.00)	0.002†	(0.00)
Unemployment Benefits					0.000	(0.00)	0.000†	(0.00)	0.000*	(0.00)	0.000**	(0.00)
Dismissal Protection							-0.100**	(0.04)	-0.093*	(0.04)	-0.198**	(0.07)
% of Temporary Employment									-0.002	(0.01)	-0.016†	(0.01)
DP*Temp											0.008†	(0.00)
Random Part												
√e (Level 1)	1.109		1.071		1.071		1.071		1.071		1.071	
√u (Level 2)	0.141		0.104		0.090		0.072		0.071		0.062	
Model Fit												
R^2 (Level1)			0.067		0.067		0.067		0.067		0.067	
R^2 (Level2)			0.482		0.614		0.755		0.756		0.812	
Deviance	36501.74		35658.29		35653.91		35647.58		35647.39		35644.40	
rho	0.017											

*Note: The significant coefficients are marked with † for p <0.1, * for p < 0.05,** p < 0.01, and *** p < 0.001. The Group variable is country code.*
To compare the model fit, χ^2–tests deviance (=-2LogDeviance) were conducted. These tests indicate that Model 2 fits the data better than Model 1 (p < 0.001, that Model 4 fits the data better than Model 3 (p< 0.05; and that Model 6 fits the data better than Model 5 (p < 0.1).
N (Level 1) = 11,973
N (Level 2) = 18

Dismissal Protection, unemployment benefits, and perceived employment prospects

Table 8 presents the analyses of perceived employment prospects. The ICC calculated from the empty model is 0.058, suggesting that the contextual factors matter more for employees' perceived employment prospects than for their cognitive job security. Model 2, which includes all control variables, also fails to yield any unexpected relationships. Only two of the country-level control variables – Hofstede's uncertainty avoidance index (negative coefficient) and a decrease in unemployment (positive coefficient) – are statistically significant. Positive labor market trends thus make employees more optimistic of finding new jobs of comparable quality in case of job loss, while employees in countries with a greater aversion to uncertainty tend to have lower expectations of adequate re-employment.

Table 8: Random Intercept Models on Perceived Employment Prospects

	Perceived Employment Prospects							
	Model 1		**Model 2**		**Model 3**		**Model 4**	
	beta	se	beta	se			beta	se
Fixed Part								
Intercept	2.609***	(0.06)	2.695***	(0.18)	2.679***	(0.18)	2.648***	(0.19)
Level 1								
Female			-0.060**	(0.02)	-0.061**	(0.02)	-0.060**	(0.02)
Single			0.068**	(0.02)	0.067**	(0.02)	0.067**	(0.02)
Children			0.040†	(0.02)	0.040†	(0.02)	0.039†	(0.02)
≤ 30 years			0.232***	(0.03)	0.232***	(0.03)	0.232***	(0.03)
≥ 50 years			-0.328***	(0.03)	-0.328***	(0.03)	-0.328***	(0.03)
Degree			0.029**	(0.01)	0.029**	(0.01)	0.029**	(0.01)
Training			0.020	(0.02)	0.021	(0.02)	0.020	(0.02)
Use of Skills			0.065***	(0.01)	0.065***	(0.01)	0.065***	(0.01)
Public Servant			-0.130***	(0.03)	-0.130***	(0.03)	-0.130***	(0.03)
Union Member			-0.136***	(0.02)	-0.136***	(0.02)	-0.137***	(0.02)
Managers and Professionals			-0.025	(0.03)	-0.025	(0.03)	-0.025	(0.03)
Manual and Agricultural Workers			0.045†	(0.03)	0.045†	(0.03)	0.045†	(0.03)
Elementary Occupations			0.127**	(0.04)	0.127**	(0.04)	0.127**	(0.04)
Reduced working hours			0.081***	(0.02)	0.081***	(0.02)	0.081***	(0.02)
Supervisory Position			0.033†	(0.02)	0.033†	(0.02)	0.033†	(0.02)
Relations with Management			-0.016	(0.01)	-0.016	(0.01)	-0.016	(0.01)
Relations with Colleagues			-0.006	(0.02)	-0.006	(0.02)	-0.006	(0.02)
Level 2								
Unempl. 2000-2005			0.003	(0.02)	-0.002	(0.03)	-0.005	(0.03)
Decrease in Unemployment			0.176†	(0.09)	0.202*	(0.10)	0.205*	(0.10)
Uncertainty Avoidance			-0.007***	(0.00)	-0.008***	(0.00)	-0.007**	(0.00)
% of Temporary Employment			0.003	(0.01)	0.002	(0.01)	0.002	(0.01)
Dismissal Protection					0.044	(0.08)	0.026	(0.08)
Unemployment Benefits							0.000	(0.00)
Random Part								
√e (Level 1)	1.103		1.077		1.077		1.077	
√u (Level 2)	0.266		0.183		0.182		0.180	
Model Fit								
R^2 (Level1)			0.046		0.046		0.046	
R^2 (Level2)			0.549		0.556		0.563	
Deviance			37639.825		37639.513		37639.249	
rho	0.058							

*Note: The significant coefficients are marked with † for p <0.1, * for p < 0.05,** p < 0.01, and *** p < 0.001. The group variable is country code.*
To compare the model fit, χ^2–tests deviance (=-2LogDeviance) were conducted. These tests indicate that Model 2 fits the data better than Model 1 (p < 0.001) but do not show any statistical significance differences between Model 4, Model 3 and Model 2.
N (Level 1) = 12,583
N (Level 2) = 20

Hypothesis 2, which suggests that more stringent levels of dismissal protection inadvertently have a negative effect on workers' perceived employment prospects, is not confirmed. Hypothesis 5, which suggests that high expenditures on unemployment benefits – be they passive labor market policies, which allow individuals to take their

time to look for jobs that match their qualifications and needs, or active labor market policies, which support them in their job search through training and placement services – are associated with greater perceived employment prospects, is likewise not supported. The coefficient is positive, i.e., points in the expected direction, but is not statistically significant at $p < 0.05$. One explanation for this lack of statistical significance is that the measure is too coarse to actually capture the assurance function of unemployment benefits[16]. In many countries the generosity of unemployment benefits depends on individuals' previous income and not all employees fulfill the eligibility criteria to receive the benefits. For example, because they have not been working long enough or because specific benefits, especially active labor market policies, are targeted only towards particular groups, such as old or young workers.

In terms of "practical relevance", the results based on the standardized variables (Table provided in the Appendix) show that the importance of unemployment benefits for perceived employment prospects in comparison with the other factors is relatively low. The standardized coefficient of 'unemployment benefits' is "only" 0.024, whereas the two age variables (coefficient of ' ≤30 yrs.' being 0. 080 and '≥ 50 yrs.' being -0.129), decrease in unemployment (0.090), and 'uncertainty avoidance' (-0.151) carry a much higher weight.

[16] With any of the other commonly used measures of unemployment benefits (see Footnote 7 for a detailed description), the results neither change nor become statistically significant.

Unemployment benefits and affective job security

The results for affective job security are presented in Table 9. For affective job security, i.e., the degree to which individuals are not worried about potential job loss, country-level characteristics are even more important than they are for cognitive job security and perceived employment prospects. The intraclass correlation value of 0.084, calculated from the empty model, indicates that contextual factors significantly influence whether workers are worried about potential job loss. Similar to what was shown in the previous tables, the inclusion of all the control variables in Model 2 does not yield any surprises. The coefficients of all country-level variables point in the expected direction. However, none of the coefficients are statistically significant with an α-level of at least 0.05.

On the other hand, Model 3 shows that the relationship between the generosity of unemployment benefits and affective job security, as presumed by Hypothesis 6, is positive and statistically significant at the $p < 0.001$-threshold. This suggests that institutions indeed instill confidence and positive expectations by reducing vulnerability and providing assurance. The examination of the standardized coefficient of unemployment benefits (Model 2 in Table "Standardized Values of Affective Job Security, provided in the Appendix) also indicates the practical importance of this type of labor market institution. With a standardized coefficient of 0.161, unemployment benefits are more important than any other individual or country level variable in reducing workers' worries about job loss

Table 9: Random Intercept Models on Affective Job Security

	Affective Job Security							
	Model 1		**Model 2**		**Model 3**		**Model 4**	
	beta	se	beta	se	beta	se	beta	se
Fixed Part								
Intercept	3.202***	(0.06)	2.589***	(0.17)	2.418***	(0.14)	1.398***	(0.15)
Level 1								
Female			-0.047**	(0.02)	-0.047**	(0.02)	-0.052***	(0.02)
Single			-0.060***	(0.02)	-0.062***	(0.02)	-0.041*	(0.02)
Children			-0.016	(0.02)	-0.016	(0.02)	-0.021	(0.02)
≤ 30 years			0.071***	(0.02)	0.071***	(0.02)	0.021	(0.02)
≥ 50 years			0.054**	(0.02)	0.054**	(0.02)	0.069***	(0.02)
Degree			0.025***	(0.01)	0.025***	(0.01)	0.023***	(0.01)
Training			0.065***	(0.02)	0.065***	(0.02)	0.018	(0.02)
Use of Skills			0.043***	(0.01)	0.043***	(0.01)	0.025***	(0.01)
Public Servant			0.139***	(0.02)	0.140***	(0.02)	0.056**	(0.02)
Union Member			-0.038*	(0.02)	-0.039*	(0.02)	-0.055**	(0.02)
Managers and Professionals			0.007	(0.02)	0.007	(0.02)	0.009	(0.02)
Manual and Agricultural Workers			-0.065**	(0.02)	-0.064**	(0.02)	-0.045*	(0.02)
Elementary Occupations			-0.144***	(0.03)	-0.144***	(0.03)	-0.120***	(0.03)
Reduced working hours			0.070***	(0.02)	0.070***	(0.02)	0.089***	(0.02)
Supervisory Position			0.062***	(0.02)	0.061***	(0.02)	0.021	(0.02)
Relations with Management			0.107***	(0.01)	0.107***	(0.01)	0.058***	(0.01)
Relations with Colleagues			0.066***	(0.01)	0.066***	(0.01)	0.054***	(0.01)
Level 2								
Unempl. 2000-2005			-0.021†	(0.02)	-0.036†	(0.02)	-0.037†	(0.02)
Decrease in Unemployment			0.022	(0.10)	0.038	(0.07)	-0.008	(0.08)
Uncertainty Avoidance			-0.003	(0.00)	-0.000	(0.00)	0.000	(0.00)
Dismissal Protection			0.006	(0.07)	-0.089	(0.06)	-0.071	(0.07)
% of Temporary Employment			-0.008	(0.01)	-0.006	(0.00)	-0.006	(0.00)
Unemployment Benefits					0.000***	(0.00)	0.000**	(0.00)
Cognitive Jobsecurity							0.296***	(0.01)
Perceived Employment Prospects							0.104***	(0.01)
Random Part								
√e (Level 1)	0.869		0.846		0.846		0.775	
√u (Level 2)	0.267		0.175		0.131		0.143	
Model Fit								
R^2 (Level1)			0.051		0.051		0.204	
R^2 (Level2)			0.572		0.761		0.711	
Deviance	32243.578		32534.052		32522.986		29359.17	
rho	0.084							

*Note: The significant coefficients are marked with † for p <0.1, * for p < 0.05,** p < 0.01, and *** p < 0.001. The group variable is country code.*
To compare the model fit, χ^2–tests deviance (=-2LogDeviance) were conducted. These tests indicate that the model fit steadily increases from Model 1 to Model 4 (p < 0.001).
N (Level 1) = 12,583
N (Level 2) = 20

Relationships between the various facets of perceived job security

In Model 4, cognitive job security and perceived employment prospects were added as additional individual-level predictors. The coefficients of both variables have positive and statistically significant signs, thus confirming Hypothesis 7a and Hypothesis 7b. In other words, cognitive job security, which is heavily influenced by the strength of dismissal protection and the proportion of temporary workers in a given country, reduces worry about job loss, since the job is actually not endangered. In addition, high levels of perceived employment prospects, potentially influenced by the generosity of unemployment benefits, reduces worry about job loss because employees are aware of potential alternatives, knowing that they can easily find new jobs.

The examination of the standardized coefficients of these variables (Table provided in the Appendix) underscores the practical relevance of these factors to affective job security. The standardized coefficient of cognitive job security is 0.369, and that of perceived employment prospects 0.115. These perceptions are as important as the generosity of unemployment benefits (value of standardized coefficient is 0.138) in reducing workers' worries about job loss.

Although the findings of these internationally comparative analyses are in agreement with earlier studies on European labor markets (Clark et al., 2009; Erlinghagen, 2008; Postel-Vinay & Saint-Martin, 2004; Sousa-Poza, 2004), they are are still puzzling. One potential explanation is that employees do not have sufficient knowledge of the institutions underlying their employment contracts or may not believe that what is "written in the books" is actually acted on in practice (Zylan &

Soule, 2000). In order to generate confidence and positive expectations, institutions need to be trusted and considered capable of doing what they were designed to do. In an environment characterized by a high degree of volatility and economic uncertainty, people may not believe that formal policies such as dismissal protection are actually able to protect them from the distortions of capitalist markets – unless there is a population that fares considerably worse than they do themselves.

The results may, moreover, be due to legal and economic changes over time. Trust in the potency of national dismissal protection may have faded in recent years (OECD Stats 2009). This assumption is backed up by one study of the ISSP data from 1997 (Anderson and Pontusson 2007)[17], which shows that in the mid-1990s high levels of dismissal protection were indeed associated with greater cognitive job security. In addition to arguing that employees have lost confidence in the institutions meant to protect them against the arbitrariness of those with more power, it might also be that employees in countries with low dismissal protection (liberal market economies) may overestimate what "their" labor market institutions are actually capable of doing or what they are meant to do. For the U.S., Roehling and Boswell (2004) have shown that despite explicit at-will policies, employees believe that their employers are obligated to have a good reason to discharge them. The terms of the "psychological contract" (Rousseau, 1995) may hence be more important for individuals' perceptions and expectations than the terms of the written agreement.

One general conclusion that can be drawn from the analyses of the relationship between dismissal protection and cognitive job security, and thus for institutions that

[17] My findings on the 2005 wave differ from those of Anderson and Pontusson (2007), even if I use the exact same methods of analyses and variables.

reduce power differentials between unequal exchange partners, is that comparisons matter. Comparing the current to the previous situation, or one's own situation to those of others, tends to affect self-evaluation, as studies of relative deprivation have shown in various contexts (e.g., Crosby, 1982; Stouffer, 1949). When individuals become accustomed to high standards of job security, even slight deteriorations in the level of protection – as has occurred in many European countries – may reduce their trust in these institutions and may have unsettling effects.

In sum, my results partly challenge the rationality assumption underlying the large bulk of comparative literature on welfare states and capitalist economies as promoted by Hall and Soskice, at al. (2001), among others. These scholars cite the stringency of dismissal protection and the generosity of unemployment benefits as the main explanation for different skill production systems and national business models. However, if these labor market institutions do not provide workers with the confidence that they will keep their jobs, as my preliminary analyses suggest, why should employees and employers be willing to invest in firm-specific skills, which is risky and costly for both parties? The findings of this first part of the study thus require further investigation and motivate the second empirical chapter of my dissertation.

CHAPTER 6

ANALSES OF IN-DEPTH INTERVIEWS

To refine these quantitative analyses and to be better able to interpret the findings of this first empirical study, I analyze interview data that I collected from 46 university employees in Germany and the U.S. in a second study. Germany and the U.S. exhibit great differences in their labor market institutions and have therefore been juxtaposed as the two ideal types of market economies (Hall et al., 2001b) – coordinated market economies, on the one hand, and liberal market economies, on the other. Universities, moreover, are an ideal organizational setting in which to study the relationship between formal institutions and perceptions of job security. They employ a wide range of occupational groups (administrators, researchers, physical plant workers, professors, etc.) and hire their personnel on various types of employment contracts, while having similar missions and using similar technologies across countries (Clark, 1983, 1987).[18]

The main findings from the qualitative analyses are that (1) employees clearly distinguish between the different facets of perceived job security (i.e., cognitive job security, perceived labor market prospects, and affective job security); (2) individual and organizational-level characteristics are far more important for employees' feelings of job security than national-level institutions; (3) employees' knowledge about these institutions and policies seems to be fairly limited, in particular knowledge about

[18] Since the subject of "job security" is always delicate in the eyes of HR representatives, the question of access guided my choice of sites.

dismissal protection; and (4) employees actively manufacture for themselves feelings of job security, which is crucial for their well-being and the *sine qua non* for them to be able to perform their jobs. Depending on their personal situations, these strategies range from relying on the organization's implicit promise of rewarding loyalty and commitment with job security to making themselves indispensable to the functioning of the organization. These findings will be presented in greater detail after a description of the data and their collection.

Data and methods

Sample. The data for my two case studies come from two well-established universities in Germany and the U.S. Both are relatively large research institutions, located in the eastern part of their respective countries. While the campus of the German university is located in a major metropolitan area, the main campus of the U.S. university is in a rural area. The data were collected between January and August, 2010. Using the organizational directory, personal connections, recommendations, and snowballing, I identified approximately 30 interview partners at both universities, whom I subsequently interviewed in person.[19]

The interviewees at the German university were drawn from various colleges and administrative departments, as well as dining halls and cleaning services, which actually do not belong to the university directly but are run by independent contractors, whereas the interviewees in the U.S. all came from the same unit (albeit

[19] One interview was conducted via Skype.

one with multiple academic and administrative departments) due to problems of data access.

The final sample consisted of a total of 46 individuals[20], 26 of whom were female. The youngest interviewee was 18 years old and the oldest above retirement age, which is 65 years in Germany and 67 years in the U.S.[21] The mean age was 44. Twenty-five of my interviewees had at least a Master's degree, nine had high school degrees or were high school dropouts; the remaining 12 had completed a Bachelor degree or vocational training. Thirty-five of the respondents had children; 34 were married, engaged, or living with a steady partner. The person with the lowest tenure had been employed at the university for 1.5 years; the person with the longest for more than 30 years (average tenure was 11.78 years).

To ensure confidentiality, only the most basic demographic information is provided when I cite from the interviews, i.e., gender, job/occupational status, and research location (Germany vs. U.S.). The various types of jobs and occupations are summarized into four occupational categories, which are cleaner/facility manager/technician (C/FM/T), administrative assistant (AA), assistant director/director (AD/D), and research associate/lecturer/untenured faculty (RA/L/UF). Moreover, I forgo the information on whether the interviewee is from Germany or the U.S. whenever this detail might make it possible for a third party to

[20] Ten employees did not respond to my request to conduct an interview with them; one person did not sign the consent form; the quality of the taping of three interviews was too poor to be transcribed and my notes were insufficient for a proper analysis.

[21] In the US, the "normal retirement age" (NRA) is 67. However, the initial receipt of the pension may be deferred. Credit is given for deferment up to the age of 70 (OECD 2011; http://www.ssa.gov/OACT/ProgData/nra.html).

identify the respondent. An overview of the demographic characteristics of my interviewees is provided in Table 10.

Table 10: Summary of Interviewees' Demographic Characteristics

	American University	German University
Duration of Interview	Average of 48 min	Average of 109 min
Gender	37% male, 63% female	50% male, 50 % female
Age	Average of 46 years	Average of 41 years
Education	23, 5 % high school or less 20 % BA or associate degree 30 % Master or LLM 23,5 % PhD	8 % high school or less 35 % Vocational training 42 % Master 15 % PhD
Tenure	Average of 11 years	Average of 14 years
Children	87% have children	64% have children
Marital Status	67 % married, engaged, or living with a steady partner 33 % single or divorced	72% married, engaged, or living with a steady partner 28% single or divorced
Organizational Rank	10% cleaners/facility managers/technicians (C/FM/T) 43% administrative assistants (AA) 30% assistant directors/directors (AD/D) 16% researchers/lecturers (RA/L/UF)	35% cleaners/facility managers/technicians (C/FM/T) 35% administrative assistants (AA) 21% assistant directors/directors (AD/D) 7% researchers/lecturers (RA/L/UF)

Research site 1. The German university is located in the former East Germany and has around 30,000 students and 5,000 employees, of whom 400 are tenured professors and 1,800 untenured academic faculty. Cleaning services and dining are outsourced to external providers. After German reunification, the university underwent a major restructuring process (for a general overview on reunification politics see Anderson, Kaltenthaler, & Luthardt, 1993; and for the transformation East German education system see Reuter, 1993). Between 1990 and 1994, more than 3,000

employees quit the university. They either went into early retirement or were laid off as part of the organizational restructuring process that occurred due to financial concerns and the university's new political orientation. Departments conducting research on Marxism/Leninism had become obsolete and study programs needed to be coordinated with other public universities in the area.

In January 2010, the time during which I started collecting my interview data, an important clause in the collective bargaining agreement for the non-academic staff expired. This clause had prohibited "organization-related" dismissals between April 1, 2004 to January 1, 2010, i.e., lay-offs for structural or economic reasons.[22] Despite this reduction in their actual protection against lay-offs, university employees at the German research site still cannot be easily dismissed. Like any other employee in Germany, they can be laid off only for good reasons, which include personal deficiencies, such as health problems or lack of ability; individual misconduct, such as stealing or disclosure of organizational secrets; and now also economic and commercial reasons, such as decreases in orders or the need to down-size (Pfarr et al., 2005). In case of a dismissal, employers must respect a notice period[23], provide a justification, and obtain the approval of the organization's works council (if there is one) [24]. If the dismissal is justified by economic or commercial factors, social criteria need to be considered when deciding who leaves the organization (ibid.)

[2222] This information was retrieved from the university's website and in background conversations with university representatives.

[23] These can range from one month for employees who have been with the organization for two years to up to seven months for employees with 20 or more years of tenure.

[24] A works council is the German "shop-floor" organization which represents employees and complements sectoral collective bargaining agreements. In organizations with more than five employees, workers have the right to elect a works council. The works council is involved in any hiring and firing decisions and needs to be informed about the organization's economic decisions.

Although there are no reliable figures on the lay-offs occurring in the public sector compared to the private sector in Germany, the general notion is that even those public sector employees who are not public servants are much better protected against lay-offs than their counterparts in the private economy (Bielenski & Ullmann, 2005; Jahn, 2004). During the time I conducted the interviews, the expiration of the bargaining clause did not seem to have any effect on the university's personnel policy. Despite the constrained financial situation of the federal state ("*Bundesland*") in which the university is located, no lay-offs occurred/were planned during the time I conducted the interviews (nor the year before).

Research site 2. At the American university, there are around 3,000 faculty and 11,000 staff for 20,000 undergraduate and graduate students at 14 colleges and schools. In contrast to the German case, the university in the U.S., with its mixture of private and state-funded schools, was severely hit by the financial crisis of 2009 and therefore underwent some major restructuring processes before and during the time of the interviews. In the year that preceded my data collection, the university cut around 10 percent of its non-academic staff (around 700 positions) through lay-offs and early retirement incentives; more cuts were expected in the forthcoming years.[25] The academic unit at which all my interviewees worked has around 300 employees, 100 of whom are faculty. Over the course of four years, 45 employees (around 15% of the of the unit's support staff) had to leave the organization due to economic and structural changes.

[25] Information retrieved from the university's independent student newspaper (date: 2/14/2011).

As part of its outreach program, the unit has several regional offices. By conducting my interviews at two different branches of the academic unit, I was able to take advantage of the different labor market conditions at the two campuses – as one was situated in the metropolitan area and the other in a rural area – as well as the varying degrees to which the various departments were affected by the restructuring processes.

With the exception of the unionized staff, all individuals I interviewed at the American university were employed "at-will", meaning they could be laid off "for good cause or for no cause, or even for bad cause" (Payne v. Western & Atlantic Railroad, Tennessee 1884). According to information from departmental directors and an HR representative, however, progressive discipline is applied and a 30-day notice is usually given in case of discharge.[26]

Overall, it becomes clear from these descriptions that the two research sites differ considerably. They are embedded in different national labor market systems with distinct policies, which differ in the stringency of dismissal protection, the generosity of unemployment benefits, and the ease with which workers can form unions. The economic and structural situation, moreover, also varied considerably between the two research sites at the time of the interviews[27].

Interview protocol. On average, the interviews lasted one hour and seven minutes (the longest was five hours and 20 minutes and the shortest was 18 minutes).

[26] This information was retrieved from the university's website (date: 2/14/2011) and background conversations with university representatives.
[27] Average unemployment rate at the time of the interviews as 7.2 percent in Germany between January and April, 2010 and 9.6 percent in the U.S. between May and August, 2010. These are harmonised data provided by the OECD.

All of the interviews were audio taped and transcribed (Ragin, 1994; Ragin, Joane, & White, 2004). My interview schedule was divided into two sections. The first part of the interview was conducted in a very exploratory manner, asking open-ended questions regarding the respondents' working biographies and work-related anxieties and uncertainties. I also asked the respondents about their direct and indirect experiences with unemployment as well as knowledge and perceptions of relevant labor market institutions and investigated the consequences and implications of lacking job security, especially their loyalty vis-à-vis their respective organization, their willingness to invest in organization-specific skills, and their participation in different types of training.[28] In the second part of the interview, demographic information that had not already been mentioned was collected, when appropriate. The interview schedule is provided in the Appendix. The initial interview schedule was continually revised and refined during the interview process, allowing me to incorporate new themes into the conversations with the interviewees.

In the analysis, which took place after the completion of the data collection, I looked for recurring patterns and themes in the data and systematically coded the content of the interviews. Some of the categories emerged from the data, whereas others were derived from theoretical bases and the findings of my quantitative analyses. Based on these heuristic codes, I reorganized and re-analyzed the data, refining my coding scheme in the process (Ragin, 1994; Ragin et al., 2004; Weiss, 1995). The results of these analyses are presented in the following sections.

[28] According to the "Varieties of Capitalism" argument, the acquisition of firm-specific skills should be closely linked to stringency of dismissal protection and generosity of unemployment benefits. However, no clear pattern emerged in the answers to this question.

Results

Perceived job security and the negative consequences of lacking job security

By talking about their expectations and worries regarding the permanency of their jobs and labor market prospects, all respondents in my interviews implicitly distinguished between the three analytical dimensions of perceived job security used in the quantitative analyses, i.e., *cognitive job security*, describing the expectation of keeping one's job, *affective job security*, describing the absence of worries about losing one's job, and *perceived employment prospects*, describing the expectation of finding a new job of comparable quality (Anderson et al., 2007; Borg et al., 1992). In addition to confirming the distinctiveness of these three aspects of perceived job security, the interview data illustrate further aspects of the three facets that were not captured by the ISSP data.

Cognitive job security. While the survey question on cognitive job security ("My job is secure," with five possible answer categories, 5 meaning "strongly agree" and 1 meaning "do not agree at all") does not allow for differentiation between the various aspects of a job that one can potentially lose, the in-depth interviews made it clear that cognitive job security refers not only to the permanence of the entire job but also the permanence of particular aspects of it, such as the structure of the job, work autonomy, responsibilities, and task variety (e.g., Ashford et al., 1989). The importance of the versatility of a job and its variety of tasks, for example, is illustrated by the following statement from a senior executive at the German research site: "Responsibility, creativity, autonomy, freedom – I am managing a program. That's

what I like about my job. This is how it should be. Of course, it has its benefits to come in at eight and go home at 17:30, but that's not what I love about my work" (AD/D, male, Germany). An administrative assistant at the American site made a similar statement: "So it's just very monotonous, you know, go into the computer and do this, do that. I would not want to do that. I would not want to sit there at the computer doing that all day. I like to have interaction with the employees and answer questions, etc. etc." (AA, female, U.S.).

The possible loss of such important aspects of work worried employees and resulted in major dissatisfaction and loss of motivation, as illustrated by the following statement from an employee whose program underwent major restructuring: "When I started working in academia, I wanted to teach. This particular job seems to have evolved into something more like selling real estate or making widgets. We're expected to generate our own funding by selling our educational services. I didn't start out wanting to have a job that was chasing funding, but I feel like I've been doing it... It makes me question whether I really want to do this job anymore. ... It's a very different situation now" (AD/D, female, U.S.). Other important aspects of work that respondents were worried about losing in the course of organizational restructuring were their working hours and flexibility. "I am afraid that they will be cutting my hours even more." (AA, female, U.S.). "So, it's just a lot of flexibility. … I think I am more afraid of going somewhere else and having to fight for all that again" (AA, female, Germany).

What makes the experience of lacking job security particularly unbearable for most employees is the feeling of powerlessness and uncertainty, i.e., lacking the

ability to change the current situation and lacking the knowledge of what will happen next. The discomfort with such a situation came up as a recurring theme in the interview data and has also been shown in previous research (Greenhalgh et al., 1984 in particular). Individual reactions to such uncertainty and feelings of powerlessness, however, varied strongly among the respondents. Some approached the challenge of uncertainty and powerlessness in a very rational way, as illustrated by the comments from a female researcher:

> I think one question is sort of what I can do and what I feel is out of my control. Big law firms or consulting firms are a good example. They hire thousands of people and only a few of them get promoted and eventually the rest of them go. And it's like, then, you're in control to do a really good job. However, it's not in your control if you did really well but too many people were better than you. … It's the same now with all that economic uncertainty. If you work in a factory, you could do a fantastic job but if they don't get any orders, that's not in your control. … So I think that's what it is in part for me. It's really not all in your control and you just have to deal with it" (RA/L/UF, female, U.S.).

For others, being powerless did not only refer to their economic and personal situations but involved structural problems. For them, the experience of feeling powerless was something quite hard to deal with: "You have to fight with one hand tied behind your back or both hands tied behind your back if you're insecure. You can't go to the people who are generating that insecurity and confront them or have a principal conversation with them because they lie to you. There is nothing you can do and that's what makes it so hard" (RA/L/UF, male, U.S.).

Feeling in control of one's job situation despite great uncertainty seems to help employees cope with uncertainties – or at least for the highly educated, as the following statement illustrates: "One of the reasons why I like to write grants and to have a hand in what I receive is that I have control. I can't blame anybody else for having written it badly. The other sense of control that finding grants gives me is that

I'm essentially funding myself a partial job every year. I do that on a recurring basis and that helps a lot“ (RA/L/UF, male, U.S.).

Perceived employment prospects. Although the lack of cognitive job security can also go hand in hand with a negative assessment of one's labor market prospects (particularly in difficult economic times, as was the case when the interviews were conducted in 2010)[29], all the respondents distinguished the belief that their jobs were secure (cognitive job security) from the assessment of the possibility of finding new jobs (perceived employment prospects).

In the German context, none of the permanent employees expected to lose their jobs, yet almost all were pessimistic about finding any type of new job (of comparable or even inferior quality) if they had to leave the organization. This statement from one long-term employee at the German university illustrates this lack of linkage between cognitive and affective job security: "I pretty sure that I can stay here until I retire, if I want to. I feel this is a pretty luxurious situation. … Some of my friends at my age, they have great difficulties finding a job and have been unemployed for a long time. It would be the same for me, I am pretty sure. Especially given that I have never applied to a job elsewhere. Where should I actually go to apply? In the private sector? I think, there, the general notion is that we are lazy and that our skills are outdated. Given that we still work with old computer programs, I actually have to admit that they are not entirely wrong" (AA, female, Germany).

In the American context, in contrast, employees did not have firm beliefs about the continuity of their jobs. To them, the lack of "real" job security seems to be an

[29] Pearson's correlation coefficient for the correlation between cognitive job security and perceived employment prospects using the 2005 ISSP data is 0.102 for Germany and 0.030 for the U.S.

everyday problem. As an employee from the campus in the metropolitan area put it, "there are always insecurities and there will always be lay-offs. So you have to show your skills. I always was concerned about my job security, but since I work pretty hard to stay here, I try to always advance. But, yeah, there are always insecurities in every job" (C/FM/T, male, U.S.). An employee working on the campus in the rural area drew a similar conclusion: "You know, nobody is safe. You're just not. Nobody's job is secure. Not even the jobs of those who work in a prison, although they're always gonna have criminals"(AA, female, U.S.).

For employees in the U.S., however, the lack of confidence of keeping a job is partly offset by the expectations of being able to find a new one, at least one with lower pay or less attractive working conditions. Employees of all organizational ranks at the two research sites in the U.S. seemed not to shy away from jobs below their abilities and previous experience, as the following citations illustrate:

> Given that I have a college degree, I have a lot more options. Even if the economy is bad I can get a job – even if it was a job that I didn't really want. I can actually walk into a restaurant and get a job as a waitress, which I did many, many times (AD/D, female, US).
>
> What it truly boils down to is, "Can I replace the paycheck?" McDonald's is paying the same as the university is paying me, so am I really that worried about losing my job? Wal-Mart is closer, McDonald's closer, Burger King is closer, Kmart is closer. So am I really that worried about a title if I'm replacing the paycheck, dollar for a dollar, do I really have to worry about the title? No, I don't (C/FM/T, male, US).

This tendency was less pronounced in Germany. Not only were most employees from the German university less confident about finding new jobs, they were also less willing to work in jobs below their qualifications than were their American colleagues.

> With all the education I have and the long time I invested to get where I actually am, I am not yet willing to give up on the dream of becoming a professor one day – even though it's really hard these days (RA/L/UF, male, Germany).

Affective job security. When they did not believe that they would be able to quickly find a new job of comparable quality, respondents in both countries expressed worries and anxieties about the prospect of job loss, which corresponds to the third dimension of job security, *affective job security*. Some feared not being able to pay the bills. "You know, now my check pays the mortgage and the car payment and my husband's check pays everything else and if I don't have my check, you know, something is not gonna get paid" (AA, female, U.S.). Others were afraid to lose an important source of meaning in their lives: "I don't know if I could afford to retire. Aside from that, how could I not lose my identity if I no longer work?" (AD/D, male, U.S.).

Consequences of lacking job security. Respondents who felt that the continuity of their jobs was threatened and worried about being unemployed reported all of the negative consequences of lacking job security that have been found in previous studies (e.g., Ashford et al., 1989; 1999; De Witte, 2005; Ferrie, 2001; Green et al., 2000; Smithson et al., 2000; Sverke et al., 2002), including problems of physical and mental health: "I got depressed. I got really depressed. I got very negative. I got physically sick several times but I've never been sick like that before. … You know, it got worse and worse, and it caused me to be more and more sick in my heart and in my body at times, etc" (AD/D, male, U.S.). The feeling of powerlessness also made them more likely to accept anything they were asked to do and to stop looking after themselves. According to one respondent: "I think I'm more likely to say yes to everything. I am not choosy any more; just ask "What do you need? I'll be there". I do feel much less able to say no" (AD/D, female, U.S.).

The negative consequences of employees' lack of job security for organizations were also reflected in the interviews. Interviewees who felt that their job security was threatened tended to identify less with the organization and exhibited lower organizational commitment: "And I've narrowed my scope of work as well. So I no longer do the work of my program. I just focus on my team. I have to say, I've become more self-interested, whereas I used to think a lot more broadly about what were the good connections for the school. ... And that's is a little bit of disengagement on my part, you know" (AD/D, female, U.S.).

In addition, the concern about losing their jobs also reduced workers' willingness to speak up, express their concerns, and exhibit organizational citizenship behavior: "When everybody is running scared to work, then everybody is protecting their own little thing. These little networks of support that you have just disintegrate. Because, you know, you would ordinarily have this group cohesion where you have a bunch of people supporting each other but nobody is willing to support anybody else in case it pointed at them, right? … Everybody, I think, is really, really afraid of speaking up, to stick out. Yeah, I am afraid, too" (AA, female, U.S.). Engagement and support for others and extra-role behaviors, however are a crucial element of organizational success (Feather et al., 2004; Reisel, Probst, Chia, Maloles, & König, 2010). A recent study by Detert and Edmondson (forthcoming), moreover, shows that such self-censorship, which has detrimental effects on the functioning of organizations, is very common.[30]

[30] A somewhat contradictory and, most likely, idiosyncratic finding is that interviewees also said that the joint experience of worrying about their jobs brought them closer together with their colleagues. One could easily imagine that employees would start to become more competitive and mistrustful and

Increased turnover intention, a consequence of lacking job security well-established in the literature (Barling et al., 1996; Chirumbolo et al., 2003; Pfeffer, 1998; Sverke et al., 2001; Sverke et al., 2002), was another negative consequence that came up as a recurring theme in the interviews. Several of the employees who did not feel confident about the continuity of their jobs mentioned that they were looking for other jobs: "So I deal with it by trying to do my job as best I can while always looking for something else. It's just a very difficult place to stay" (AA, female, U.S.).

In sum, the interviews showed that the three analytical dimensions of perceived job security – cognitive job security, perceived labor market prospects, and affective job security – indeed capture different elements of the concept and that the respondents in both countries distinguish between these aspects in their descriptions of their current job situations, work-related anxieties, and expectations. The negative consequences of lacking job security, found in previous works using surveys (see Sverke's and Näswall's (2002) metanalysis for an overview), also emerged as themes in the interviews.

In the following sections, I use the interview data to interpret the findings of my quantitative analysis. First, I elucidate the mechanisms that underlie the relationship between individual-level characteristics and perceived job security and then elaborate on the relationship between macro-level labor market institutions and individual-level perceptions of job security. The third part of my qualitative analyses

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eventually turn against each other in such circumstances, but this is not what I observed in my case studies, as the following quote illustrates: "You know, all the staff kind of talk. We're all in the same boat and none of us feels safe. But it brings us together as staff because we have something in common. You know, it separates us from the higher-ups" (AA, female, U.S.).

is concerned with the strategies that individuals employ to construct feelings of job security.

Individual and organizational-level reasons for perceived job security

The individual-level characteristics that have been found to influence feelings of job security in my quantitative analyses[31] and in previous studies (Sverke et al., 2002 for an overview) also came up in the respondents' descriptions and explanations of whether and why they feel secure about their jobs. In addition, several individual-level characteristics that were not modeled in the quantitative analyses due to a lack of data emerged as themes in the interviews, as did several interesting interaction effects between individual-level characteristics that were shown neither in the quantitative analyses of this dissertation nor in other research.

As expected, gender and marital status came up as themes and topics in the interviews. In addition, interviewees' descriptions and explanations revealed that the relationship between these variables and perceived job security is contingent on the respondent's personal background and family situation (e.g., see Tolbert & Moen, 1998 on gender differences on definitions of good jobs)[32]. Interestingly, the effects of having a spouse/partner differed for men and women. Women, even those with higher

[31] These are gender, age, marital status, presence of children in the household, education, occupation, union membership, and several workplace characteristics such as the relationship with supervisors and colleagues.

[3232] As a reminder, my quantitative analyses indicate no statistically significant differences between men and women with regard to cognitive job security. With regard to perceived employment prospects and affective job security, the analyses show that women on average tend to be less optimistic about quickly finding a new job of comparable quality and more worried about the prospect of losing their jobs than men ($p < 0.05$). While singles tend to be less optimistic about keeping their jobs ($p < 0.001$) and more worried about losing their jobs ($p < 0.001$) than married individuals or individuals in a steady relationship, they exhibit greater perceived employment prospects ($p < 0.001$).

positions and education, tended to point out that having a partner – or family support, in general – helped them to be less worried about job loss and even made them think less about the prospect of losing their jobs: "And then I got married which really helped. I am not as worried anymore as I used to be 'coz now there's two of us" (AA, female, Germany; similar statements were also made by women on the U.S. research sites). For men, however, the situation seemed to be slightly different, especially if they had children: "Like I said, now I have a family. I have two kids at home. I have a mortgage. I need the health insurance. When I was young I did not care. All I had back then was a car payment. So I'm not risk averse but right now I have stuff that needs to be protected" (AD/D, male, U.S.). Having a partner seemed to reduce the perceived responsibility to contribute to the household income for women, whereas it increased the subjective burden for men. The traditional roles of the male breadwinner and the female housekeeper thus seem to influence the subjective dimension of work and employment.

Age also came up as an important factor affecting feelings of job security. The greater responsibility that older individuals tend to have for others, or the increased pressure to ensure material well-being after retirement, might explain why age is such an important predictor of perceived job security. Several respondents explicitly mentioned this link: "But I worry about it more now because I am older. And I have children. You know, I have a family that I have to take care of and back then it was just me" (AA, female, U.S.; similar statements were also made by respondents in Germany).

The negative association between age and perceived job security can be attributed to the lack of confidence of easily finding a new job of comparable quality. According to one respondent: "I mean 10 years ago, if I had lost my job, I would have been like, "Alright, well that's bad. I'll start my own firm," or "I'll find another job."… No, I wasn't really prepared for this old age" (AD/D, female, U.S.). This fear of being unable to find a new job seems to be particularly widespread among older workers in Germany, whose objective chances of finding new jobs if laid off, as measured by local unemployment rates at the time I conducted my interviews, were actually much better than those of the interviewees in the U.S.[33] According to one German respondent: "I discovered during my year of unemployment that with 40, you're considered an older worker and I won't see 40 again. It's a horrifying prospect that I might never find another job in case I lose this one" (AA, female, Germany). Although older workers were not confident about quickly finding new jobs of comparable quality, those who had stayed with their organizations for a long time, i.e., had long tenure (which was the case with most interviewees at the German research site but also for many at the U.S. sites) tended to be very confident about the continuity of their jobs: "I've been here long enough. I've seen how it grew and how it went down. After everything we went through after reunification, I don't think that the changes that may happen in the future will harm me" (AD/D, male, Germany).

By comparing their current situation to earlier times, for example when they were younger or not yet married, respondents were implicitly alluding to the fact that their *relative situation* was at least as important for feelings of job security as their

[33] The average unemployment rate in Germany between January and April, 2010 was 7.2 percent and 9.6 percent in the U.S. between May and August, 2010 (data provided by the OECD and harmonised).

objective one. The importance of comparisons became even more explicit when they talked about their skills and qualifications. One interviewee directly stated that "being a step ahead" with his professional abilities was what ensured his job security: "I mean my job security depends on my skills, for instance. To have some comparative advantage is what counts" (RA/L/UF, male, U.S.). Likewise, comparing one's own education to those of others can also decrease perceived job security when others have "more to offer," as the following exemplifies: "I do not have a college degree; everybody who was in my position does, so that puts me at a disadvantage" (AA, female, U.S.). Thus, rather than the absolute level of education, formal degrees, and skills, it is the comparison with others of similar organizational rank or in similar positions that seems to impact feelings of job security.

The positive association between union membership and perceived job security that I found in both my quantitative and qualitative analyses can be explained in a similar manner – at least for unionized workers in the U.S. The unionized workers I interviewed in the U.S. all felt more confident about keeping their jobs than their non-unionized counterparts: "Being a union worker gives me a little more job security, I guess. I am definitely more secure than the non-unionized workers here" (C/FM/T, male, U.S.).

In addition to this relative betterment, other factors seem to matter for the positive association between union membership and perceived job security. In the U.S. for example, senior union members who are in danger of being laid-off can replace junior members if they are qualified for the position ("bumping right"), which also contributes to their perceived job security. Moreover, unionized workers in both

countries mentioned that the university management has to deal with the union representatives and not only the single members when planning to terminate employees, which also helps them to feel more secure about their jobs.

Having such support turned out to be an important element in employees' perceptions of job security. The feeling of being supported or having someone fighting for their position helped my respondents to be confident of keeping their jobs: "I feel much, much more secure and more supported because the faculty support my position. … Those are the guys I have to keep happy and then they'll keep the dean happy" (AA, female, U.S.).

Another observation that applies to workers in both countries is that temporary employees, who by definition do not have the prospect of an open-ended career within a particular organization, do not seem to be confident about the continuity of their jobs. In accordance with previous research (De Witte, 1999; De Witte et al., 2003; Pearce, 1998), temporary workers in both countries had low cognitive job security and found this to be a highly unpleasant situation, as illustrated by the following:

> But, yeah, temping is just an anxiety-producing situation. (AA, female, Germany).
>
> It's not good being a temp, especially, in the economic climate today, it's… just no jobs and always the risk that my contract will not be renewed. You know, at one point that was fun because we weren't tied down to anything. Loose and fancy for the instincts the expression goes, but now there are just so few jobs. (AA, female, U.S.).

Here again, the severity of the burden seems to be contingent on other circumstances. Older employees seemed to be more concerned when working on a temporary contract than younger ones, as were those who had been employed as temporary workers several times in a row: "So I guess I've had four terms then... yeah, as I said I can't believe how long I've been here. But each time, I get very depressed

and I just think that, you know, if I can't have a job, I can't live, literally, because there's nobody who's going to help me." (AA, female, no information on research site to ensure confidentiality). In contrast, those who worked in jobs that are characterized by great discontinuity, e.g., lecturers and research associates in Germany, did not seem to be negatively affected by working on temporary contracts: "Working on a temporary contract is normal. That's just what it is. You'll find no university, nowhere in Germany, where people in my age or position work on a permanent contract or are public servants. It's normal to me. I don't care. Some day this will change, when I am a professor, I guess – which I hopefully will be at some point" (RA/L/UF, male, Germany).

Previous experiences with unemployment and job searches also seemed to influence employees' feelings of job security in both countries. Positive experiences with job searches in the past increased individuals' perceived employment prospects and affective job security. That is, those who had always found a job in the past when looking for one were not worried about their future, even though they were not sure whether they would actually stay with the organization. This attitude was particularly widespread at the two research sites in the U.S., where respondents were not only confronted with a greater chance of losing their jobs, but also had objectively lower chances of quickly finding new ones than the respondents at the German research site, given the inferior labor market conditions. According to one American respondent: "Well, you know, I've never been unemployed but I've always been willing to work as a temp and when I first got here, I actually started working as a temp secretary. You know, there's always the need for temps" (AA, female, U.S.). In Germany,

respondents were much more pessimistic about their chances of finding new jobs, especially when they had previously had trouble finding a job or knew someone for whom it had been difficult: "It was so hard to eventually get in here, to be hired as a permanent employee ("Planstelle"). I do not want to imagine what it would be like to go through the entire process again. … One of my neighbors …, she also has big trouble finding something. She had been staying home with the kids for some time and now, and she won't get in any more" (AA, female, Germany). Personal experience and observations may thus exert a much more powerful influence on individuals' perceptions than do labor market policies (known as the availability bias, see Kahneman and Tversky 1974; 1981).

The idea of involuntary job loss, however, never seems to be free from worry and concern, either for employees in Germany nor in the U.S.: "I always knew I'd find something but I always had that nagging in the background. You know, I'm a single mom, what if I get hurt? What if I have to go in for surgery, you know? What do you do then when you're on disability and you're only getting a partial pay check?" (C/FM/T, female, U.S.). Negative experiences, direct or indirect, not only leave scars but also unsettle employees, making them apprehensive at the prospect of dismissal and pessimistic about their labor market chances. Knowing that others have lost their jobs and have then had a hard time finding new ones (or had no problem at all) thus seem to impact workers' confidence in the same way as does their own experience (De Witte et al., 2003).

In sum, the interview data substantiated the findings of my quantitative analyses on the individual-level causes of job security and revealed the importance of

several more individual characteristics that could not be modeled with the ISSP data, such as the terms of the employment contract (temporary vs. permanent position), organizational tenure, and previous experience with unemployment. In addition to substantiating the findings of my first study, the qualitative data also shed some light on interesting interaction effects between several individual-level characteristics (e.g., gender and marital status) and reveals the mechanisms and processes by which individual-level characteristics generate feelings of job security. The main findings of this first section are that a) one's own situation in comparison to others influences perceptions of job security more than one's objective situation, b) the degree of dependence employees feel with regard to a particular job is an important determinant for perceived job security, and c) personal experiences and observations from their immediate environment are central to workers' feelings of job security and their expectations about future employment prospects.

The role of institutions in generating feelings of job security

An important motivation for conducting the in-depth interviews with employees of varying organizational ranks and educational backgrounds in Germany and the U.S. was to obtain a better understanding of the results of my quantitative analyses. According to the logic underlying the argument of institutional complementarities (Hall et al., 2001b), higher levels of dismissal protection should be associated with greater cognitive job security, and more generous unemployment benefits should be associated with greater perceived employment prospects and higher affective job security. However, my quantitative analyses, based on survey data from

the ISSP and data on labor market institutions from the OECD, did not confirm all of these relationships.

As a reminder, the relationship between unemployment benefits and affective job security was positive and statistically significant; the relationship between unemployment benefits and perceived employment prospects was also positive but statistically not significant; the relationship between dismissal protection and cognitive job security was negative but not statistically significant unless the analyses accounted for the proportion of temporary workers in the workforce. Likewise, the relationship between the proportion of temporary workers and cognitive job security by itself was also negative and statistically not significant. Only in the presence of a large proportion of temporary workers, i.e., employees with much lower levels of protection than those of permanent employees, does dismissal protection seem to lend its protective psychological effect.

Previous studies on the relationship between labor market institutions and perceptions of job security based on data from European labor markets also found that workers in countries with high dismissal protection tend to feel less secure than those in countries with little legal protection, though they did not examine the contingency of the effect of dismissal protection on the presence of temporary workers. (Clark et al., 2009; Postel-Vinay et al., 2004; Sousa-Poza, 2004). These studies, however, were not able to provide an explanation for this disconnect. With the analysis of my qualitative data, I seek to fill this gap.

Limited knowledge about policies reducing power differentials. One goal of conducting interviews with employees was to learn how much respondents knew

about labor market institutions. If employees lack sufficient knowledge about the institutions that underlie their employment contracts, it is not be surprising when policies fail to produce the expected effects. The suspicion that employees do indeed have insufficient knowledge about the laws and regulations underlying their employment contracts is supported by a study from Roehling and Boswell (2004), who showed that employees in the U.S. working on at-will contracts still believed that their employer would need to have a good reason to lay them off. In another study based on longitudinal data from Germany, Giesecke (2009) found that workers on non-standard employment contracts underestimated the risks of career interruptions.

In accordance with these studies, I also found that employees did not have a good grasp of the rights they are granted through employment regulations and the benefits they can receive in case of job loss. This lack of knowledge was particularly pronounced when respondents were asked about the procedures accompanying lay-offs and terminations. Employees at the American research site, who according to state law are all "at-will employees", tended to overestimate their protections. They believed that the university would need to have a reason to lay them off: "I think legally, they have to give you a reason why, but then I hope I'm never in that situation" (AA, female, U.S.); or they expected to receive a notification if the university decided to terminate them for economic reasons: "So, if was going to be fired, I would know…. But that again is not at-will. It's something that we would be notified of. So they just can't come in one day and say, here you go, pack your things" (AD/D, female, U.S.). Others simply were not sure of the type of contract on which they were working: "I'm not sure. I don't know if I am at-will or not. In a lot of my previous jobs, I've had to sign an agreement saying,

as an at-will employee, I can be terminated at any point for any reason. And I am also free to leave at any point for any reason. I don't remember signing that here" (AA, female, U.S.).

The fact that most respondents in the U.S., regardless of their occupational rank and educational background, tended to overrate their levels of protection may be due to the university's practice of providing employees with several warnings and a formal procedure before termination. Moreover, such lack of knowledge is actually not surprising given that lay-offs and terminations can involve very individualized or organization-specific procedures (OECD, 2004: 65), which makes it difficult for individuals to assess their actual level of protection.

However, since employees in Germany did not have a good grasp of lay-off processes and the reasons for which they could be terminated either, it is actually fair to draw the general conclusion that knowledge about dismissal protection is generally fairly limited. It seems that workers with high levels of protection underestimate their security, while those with low levels of protection overestimate it. The beliefs about the contract and expectations about what is just and right in the context of an employment relationship may therefore not differ as much across countries as the actual legal provisions and seem to be more important than what is written in the books.

It must be noted, however, that not all employees were unaware of their levels of protections. In addition to those with a background in law or HR, those who felt that their or their colleagues' jobs were threatened were also more knowledgeable about their rights and protections (or the lack thereof). An employee who felt that his current position was endangered reported that he "actually just found out last week that it is

only at-will here" (C/FM/T, male, U.S.). Likewise, those who knew people who were laid off or unemployed were also more knowledgeable about the existence and the content of labor market and organizational policies. One German employee even directly attributed his knowledge about dismissal protection and unemployment benefits to the unemployment experience of a close family member: "Well, I probably wouldn't know if I hadn't had people around me [who were dismissed]" (AD/D, male, Germany).

The psychologically protective effects of dismissal protection thus seem to be limited because employees have insufficient knowledge about their rights. Together with organizational practices and norms, previous experience with the organization's handling of lay-offs and implicit expectations vis-à-vis the employer ("psychological contract") seem to be more important for feelings of job security than formal policies. However, when workers feel that their job security is threatened, dismissal protection can still decrease their feelings of powerlessness, because the threat causes them to seek to learn more about their rights vis-à-vis their employers.

Limited trust in policies reducing power differentials. Even those who were not at-will employees and knew about their rights in case of dismissals did not convey an optimistic view regarding the effectiveness of their legal protections. Neither the employees in Germany, who had not recently experienced lay-offs at the university, nor the unionized workers in the U.S., who also had relatively high protections against lay-offs but had been confronted with major lay-offs in the last four years, seemed to trust the protections that they were granted by law or by the union contract. The following statement from a unionized employee in the U.S. exemplifies such general

mistrust: “And they kind of targeted her [a colleague] and found just a bogus reason to fire her. It was something that all of us have done before. They accused her of stealing the company’s time and money. It was ridiculous. She had used the phone. It was nothing any of us haven’t done but it was a reason that they could give and justify for her to be laid off” (C/FM/T, female, U.S.). Employees in Germany expressed similar reservations. Even those who were dissatisfied that poorly performing colleagues had not been terminated in the past did not attribute their actual job security to the legal provisions but rather to organizational characteristics: “I’d say it’s more the opposite here. We had this one colleague. She was really very unreliable, had a lot of personal problems, too, but still. We had to do all her work. It took forever until she just got a warning. It’s because we’re in the public sector and have an involved *Betriebsrat* (works council)” (C/FM/T, female, Germany).

Such lack of trust and confidence in the effectiveness of policies may not be surprising in the context of an unequal exchange relationship, in which institutions can seek to adjust but never eliminate power differentials. Since the employee remains dependent on having a job with the employer, (perceived) power differentials do not vanish. The following statement from an employee in the U.S. regarding the signing of a previous employment contract illustrates such feelings of dependence and unequal power: “I just remember having the experience of being in the backroom at the store at the mall. ’You see, you need to sign this. It just says we can fire you if we want to and that you can leave if you want to, even in the middle of your shift. And there will be no legal repercussions.’ And I said, ’Okay. I’ll sign that. I need the job’ you know” (AA, female, U.S.). Likewise, the following statement from a German employee

regarding the effectiveness of dismissal protection also illustrates that feelings of dependence never completely vanish in employment relationships: "If they really want to lay you off, they'll lay you off. There is always a reason. And even if there is no reason, would you want to work at a place where you do not feel appreciated?" (C/FM/T, male, Germany).

This loss of confidence in labor market policies and institutions seeking to reduce power differentials between the employee and the employer may also be due to the general trend towards more unstable careers and employment relations (e.g., Atkinson, 1984; Blanchard et al., 2002; Giesecke et al., 2003; Kalleberg, 2000; Polavieja, 2006). Back in 1997, for example, the association between dismissal protection and cognitive job security was still positive, as Anderson and Pontusson (2007) show in a study using the 1997 wave of the ISSP data. It thus may be that increasing levels of job instability and career turbulences have reinforced workers' feelings of powerlessness and reduced their confidence in the protective mechanisms of institutions.

Protective psychological effects of policies decreasing vulnerability. A slightly different picture emerged when the interviewees talked about the possibility of becoming unemployed and the benefits they would receive in case of a job loss. Although most interviewees were ignorant of the exact amount and duration of unemployment benefits, they all knew that they were at least entitled to financial support, as the following statements from an employee in the U.S. and one in Germany indicate:

> I think what I'd get would be something like half of what your rate is now or something like that. Unfortunately, I don't … knock on wood … but I think it's half of your salary (C/FT/T, male, U.S.).
>
> I've never been unemployed but it is something around 65 percent of your income, for a year or so; they shortened it, and afterwards it is Hartz IV (AD/D, female, Germany).

A comparison with the actual provisions of financial support in case of unemployment shows that the respondents in both countries had a good grasp of their potential benefits. In the U.S., the payment of unemployment benefits is regulated by state law. On average, states replace 50 percent of the lost wages up to a certain threshold, which is usually set at the state's average weekly earnings. This is also the case for the state in which I conducted my interviews. Eligible claimants receive 1/26 of their net wage in the "high quarter," i.e., the quarter during the last four quarters in which they had their highest wages. The maximum amount of benefits that are paid are around $400/week. The usual maximum duration of 26 weeks can be extended to up to 67 (currently even up to 99) weeks under special circumstances.[34] In Germany, the payment of unemployment benefits is regulated by federal law. Eligible claimants with children receive 67 percent of their average net income of the last 12 months; those without children receive 60 percent. Depending on the claimant's age and the time during which he or she paid the contributions to the unemployment insurance system, benefits are paid for a maximum of 24 months. Before 2005, i.e., before the

[34] Source: http://www.ows.doleta.gov/unemploy/uilawcompar/2008/monetary.pdf & http://jobsearch.about.com/gi/o.htm?zi=1/XJ&zTi=1&sdn=jobsearch&cdn=careers&tm=28&f=00&su=p284.9.336.ip_p554.18.336.ip_&tt=11&bt=0&bts=1&zu=http%3A//www.labor.state.ny.us/ui/claimantinfo/UIBenefitsCalculator.shtm

enactment of the "Hartz"-legislation that the interviewee referred to, unemployment benefits were paid for a much longer time.[35]

However, the protective function of unemployment benefits also seems to be limited – at least for the interviewees in the U.S., who did not have a positive view of the usefulness of these benefits as an actual safeguard: "That's what they give you. If you make like 600, they give you 300 and it's not worth it, it really isn't." (C/FT/T, male, U.S.). Since the receipt of unemployment benefits is also socially stigmatized, workers in the U.S. do not necessarily consider utilizing unemployment benefits, even if they are entitled to apply: "Yeah. I never was ever unemployed. I always did something. … You know, but I would take jobs under the table and stuff, I didn't - I don't wanna take unemployment" (C/FT/T, female, U.S.).

Thanks to the higher levels of financial support in case of unemployment, workers in Germany felt much more reassured by the prospect of receiving unemployment benefits in case of job loss than workers in the U.S.: "It's a little bit terrifying but… no, I mean, it really helps to know that I'm financially okay for at least a while" (AA, female, Germany). In the U.S., only unemployment benefits in combination with personal savings helped workers to reduce their worries associated with job loss: "I've also been able to save up some money; I can pull it off anytime, I can find some way to get by" (AD/D, male, U.S.).

Protective psychological effects of policies reducing relative risks and relative vulnerability. In addition to reducing power differentials between the employee and the employer and reducing the employees' vulnerability in case of job loss, I also

[35] Source: http://www.bmas.de/portal/13220/arbeitslosengeld__1.html

suggested that increasing the employee's relative position with respect to a comparison group is a third mechanism that potentially affects job security. For example, permanent employees' protections against lay-offs are much better than those of temporary employees. Likewise, unionized workers have greater objective job security than their non-unionized counterparts. While the first mechanism was found not to be effective in either my quantitative or my qualitative analyses, the second and the third mechanisms do seem to achieve their objectives.

The comparison with a reference group that does considerably better or worse has been shown to affect individuals' assessment of and satisfaction with their own situation (e.g. Stouffer 1949; Crosby 1982) and seems to also be at work in the context of the employment relationship. Relative betterment apparently increases the confidence of those with higher levels of protection, such as permanent employees compared to temporary employees: "If someone had to go in our department, for some restructuring or something, they would first let the temps go or just not renew them" (AD/D, female, Germany). Union members – at least those in the U.S. – likewise stated that they had reason to be more confident about keeping their jobs than non-union members: "I am definitely more secure than the non-unionized workers here" (C/FM/T, male, U.S.).

In particular, the "bumping right" of unionized workers in the U.S., i.e., their right to replace other employees with lower seniority with similar or lower qualifications in case of job loss, seems to positively affect cognitive job security: "If I am ever gonna be laid off, I know there are other people down at the bottom that I could bump" (AA, female, U.S.). The simple awareness of these rights seems to have

a reassuring effect, suggesting that, in principle, increasing one's relative power vis-à-vis the high-power exchange partner can be a successful strategy to ensure confidence on the side of the low-power party.

Further organizational policies that increase employees' dependence. In my qualitative analyses, I identified employer-provided benefits as a fourth type of institutional mechanism that apparently influences perceptions of job security, in particular affective job security. Employer-provided benefits, such as health insurance and pension plans, increase employees' dependence on their jobs, especially older workers and workers with long tenure. Despite the positive impact that these policies may have on employees' well-being and their organizational commitment, they also increase the costs for the employee to leave the organization. Individuals who work in organizations that provide such benefits (as the American university does) and expect to lose their jobs are thus much more fearful of this prospect than those in organizations without such benefits: "And then, you know, as of about last year, around my birthday, I started thinking, 'Oh, I really can't leave' or 'I don't want to leave' because the one benefit that I would get from retiring is that they will pay your state healthcare plan for the rest of your life. And that's huge, given the situation that we're in. Well, I really started to think, 'I need to figure out a way to stay here.' Anxiety started to come in: 'Oh, we're dead in the water with the healthcare benefits. I'll lose the chance at a lifetime of healthcare benefit.' So, economically, it started to look like, 'I really need to stay here.'" (A/AD, female, U.S.). Employees' in Germany, in contrast, who are covered by Germany's universal health care system and whose

old age pension benefits are not contingent on the university, felt less dependent on their jobs than their American counterparts.

In sum, the main finding of my qualitative analyses on the role of formal institutions and policies for perceptions of job security is that the effectiveness of dismissal protection for employees' feelings of job security is limited. The analyses of the qualitative interview data thus provide further evidence that institutions matter less than the comparative welfare state research suggests, or at least that not all types of institutions seem to work in a straightforward way. Either employees do not know what their actual protections against dismissal are or, if they do know (which is the case for those who expect to lose their jobs), they do not believe that institutions really limit the employer's power and superiority. Second, the effectiveness of unemployment benefits is also contingent on employees' knowledge about this safety net as well as on the generosity of the benefits. The third important finding is that the relative level of protection matters more than the absolute level of protection for employees' perceptions of job security, as has been shown by the statements from permanent employees with respect to temporary employees and from union members in the U.S. with respect to non-union members.

Respondents' explanations and descriptions suggest that the effectiveness of formal institutions is contingent on their comprehensibility, tangibility, and generosity. The more concrete the mechanism is by which one is protected, the more effective labor market policies can be in instilling confidence and positive expectations.

While these conclusions apply to employees in both countries, I also found considerable differences in German and American workers' assessments regarding the

use of unemployment benefits and their perceived helpfulness in case of unemployment, as well as the role such of organizational policies as health care and employer-provided retirement benefits. Taken together, my findings suggest that the rationality assumption underlying the large bulk of comparative welfare state literature may not always hold true. To design effective policies and regulations it is therefore crucial to consider the mechanisms that underlie the various types of policies and the interactions between institutions, individual characteristics, and organizational policies.

Constructing job security

In addition to validating and elucidating the findings of my quantitative analyses, I sought to use the qualitative interviews to move away from "preconceived notions of what phenomena mean in a particular setting", as demanded by Bartunek and Seo (2002) in their plea for a more qualitative approach to perceptions of job security. By analyzing the data in an exploratory manner, I find that almost all employees – even those who said that they were not sure whether they would keep their jobs in the near future – believe to have good reasons for a) why it would be unlikely that they would actually lose their jobs, or b) why they would not care about this loss.[36] Despite the worse economic situation, it is only the group of the low-income and low-educated workers that is more likely to expect job loss and more fearful of this prospect today than 30 to 40 years ago.

[36] This finding of "partial ignorance" is in line with what Jacobs and Newman (2006) have shown for the U.S.: The feeling of job security and the actual risk of job loss do not correlate for all educational and occupational groups. In their descriptive analyses of the GSS they show that only low skilled workers exhibit signs of insecurity and fear, while the higher tiers do not.

The analyses of my in-depth interview data provide further evidence for this finding and, in addition, reveal that this finding is not unique to the U.S. My findings show another interesting commonality between the employees in both countries and illustrate the role of the normative and cognitive-cultural aspects of institutions in instilling confidence about workers' future employment prospects.

Although the way in which interviewees make sense of their situations and anchor their feelings of job security is contingent on individual differences and organizational particularities, five major coping patterns of argumentation emerged from the interviews. The first is the tendency to simply ignore the threat; the second is the inclination to rely on the implicit expectations and promises inherent in the employment relationship; the third is the belief and/or the attempt to ensure that one's skills, knowledge, or current position are indispensable to the functioning of the organization; the fourth is the re- and devaluation of the current job; the fifth and last involves efforts and activities to avert threats to one's job security.

Ignoring the threat. The first coping mechanism was to simply ignore the threat of a potential job loss and to pretend that everything was continuing as usual, which I therefore term the "ostrich" or the "head-in-the-sand" technique. This behavior is also documented in the social psychology literature for other types of unpleasant events (e.g., Ditto & Lopez, 1992 for the unquestioned acceptance of favorable feedback; Lovallo & Kahneman, 2003 for the ignorance of negative feedback). Statements indicating that individuals sought to not be influenced by what was happening in their environment, e.g., rumors or the announcement of restructuring, were often made in

connection with the intention of not wanting to be worried or to simply do the best they could, as illustrated by the following:

> I am just trying not to think about it too much and try to do the best I can do (AA, female, Germany)
>
> I just live day to day. I mean I want to see my future, a good future but I try not to think about it so much. So, I do not want to lose sleep every night. Hopefully, it's for the best that I cannot dwell on it, think about it. Things are going to happen, but now I am still here. I will do the best I can (AA, female, U.S.).

Relying on implicit expectations and promises. The second type of strategy that employees used is closely related to the literature on psychological contracts (Argyris, 1960; Rousseau, 1995; Rousseau & Greller, 1994; Rousseau & Schalk, 2000; Schein, 1980; Shore & Tetrick, 1994). The expectation of reciprocity (Gouldner, 1960), which can be based either on explicit promises by organizational agents (Shore et al., 1994) or on the past or present treatment of the employees (Eisenberger, Jones, Aselage, & Sucharski, 2004), was a recurrent theme in employees' explanation for why they expected to keep their jobs, even if they were convinced that others would not.

For example, those workers with long tenure expressed the expectation that their loyalty and long-term commitment would be rewarded with job security: "I expect from the university that for an employee that has been dedicated to this institution for 27 years, they'd better find me a job elsewhere on this campus, instead of hiring somebody outside" (AA, female, no information on research site to ensure confidentiality). Likewise, the perception of being a hard worker also increased employees' expectations that nothing would happen to their jobs: "But the way I see it, if you come in and do your job, you don't have to worry. If there are people who come

in and don't want to do their job and want to get paid, they need to feel insecure. But that's definitely not me" (C/FM/T, male, U.S.).

Being indispensable or working in an indispensable position. A third theme that my respondents used to explain their confidence about keeping their jobs is their indispensability for their organizations. The belief that their skills and knowledge are crucial to the functioning of the organization provides employees not only with a rationale for why the organization has an interest in keeping them, but also with a sense of control and the feeling that they are in charge of the situation: "I feel they need me [chuckles]. I mean, of course they can fire me at any time but at this point, I'm not really overly concerned about losing my job, not as I was two years ago" (AA, female, no information on research site to ensure confidentiality). When the interviewee was asked about the reason for her confidence, she replied "Because I can … I'm the only one that can do it here. … Directors don't want to do the little jobs in registration camp. So I'm pretty much, you know … not secure but, you know, as secure as one could be. I mean technically, they could really just get rid of me and force other people to do my job. But I'm a helping hand. I've been here for so long, I know a little bit about everything, so I can help everybody do their jobs" (ibid).

Others explained that the particular position they held made it unlikely that they would lose their jobs: "I think in my case, our office has a lot of kind of institutional memory that would be gone if they fired me. … I don't think I'm indispensable but I do think that I'm, I think that I'm, hhhm, I think that I would be cumbersome enough to replace" (AA, female, U.S.). Even those who were less optimistic about their future with the organization believed that it was unlikely that they would actually be

terminated for strategic or political reasons: “Now, I feel highly insecure. And I think about it a lot. I think about what would be the signals that say that it's actually more secure than I think it is? And there are some... However, I have some reasons to think, well, I'm less likely to get laid off than somebody else. Not for institutional reasons but purely political reasons, you know” (AD/D, female, U.S.).

An additional factor, which falls into the same category, is the shortage of personnel. For several employees, having too much work was the reason that made them believe that their jobs were secure: “So right now, none of us are worried about our jobs because we’re all doing way more work to cover for other people. We have more job security than ever. … Yeah, we knew we were already short. We knew if people left that they wouldn’t be replaced and I really got to prove my job is important here” (C/FM/T, female, U.S.).

Re-evaluating and devaluating the current job. A fourth way in which employees dealt with anxieties about potential job loss involved the re- and devaluation of the job that is potentially in jeopardy. Within this framework several levels of escalation can be identified. The first is the establishment of a new reference category. By comparing their actual levels of job security to those of employees in other organizations, employees provided themselves with a sense of security. For example, they stressed the fact that the statistical chance and actual threat of losing a job were lower for university employees than for employees from other organizations: “So it’s definitely a different atmosphere when you work in, like, a corporate setting versus an academic setting. … In the corporate world, it’s, like, if you’re five minutes

late to work, you're panicking because you feel like you're gonna get in trouble. This is not the case here" (AA, female, U.S.).

This sort of comparative framing, however, emerged with respect not only to cognitive job security but also to perceived employment prospects, as illustrated by the following statement from another administrative assistant, talking about a friend of hers: "[She works] packing pills and things like that. She doesn't have any computer experience. She worked in daycare, pre-school, etc., for a while but she doesn't have formal education, you know, in anything. So it's very hard for her to find a job right now. So, when I compare myself to that situation, I don't think that I have anything to fear" (AA, female, U.S.).

Closely related to these types of comparative framing is the tendency to increase one's feelings of job security by telling oneself that having a job is much better than having no job or knowing that one will be unemployed: "I try to find something positive about it. At least we have a job, you know. I can stay here. It's not like we're put into slavery or something. We're still getting paid, you know. That's the thing. Be grateful that you have a job and don't worry too much" (AA, female, U.S.).

The next escalation level is to devalue the importance and centrality of work in one's life by concentrating on other important aspects, such as a hobby or family: "Yeah, I don't worry too much. I am not affected personally by what is going on right now because I have life after. You know, I am here to do my work. … When I am done, I go home. I have a family, I have a little daughter, so this is my work but it is not really my life" (AA, female, US). Other respondents planned to do those things

that they always wanted to do but could not because of their jobs, which also includes decreased dependence on their jobs: "Well, you know, I am not from here originally. If they let me go, I would go back home, and even though it is rough out there, worse than here, but if I lose my job then I am just going to go there. This is something I wanted to do for a long time. It is even something I would look forward to" (AA, female, U.S.).

Closely related to this last point are the strategies that I term "devaluation strategies." Employees who clearly expect to lose their jobs reduce their cognitive dissonance (Festinger, 1957) and make the potential discharge more bearable either by telling themselves that their needs and expectations do not match those of the organization or by stressing the fact that the organization has violated the implicit terms of the employment relationship: "I guess one of the sayings that kinda gets under my skin here quite a bit is that I hear the whole 'Well, you should be glad you have a job.' You know what, there is nothing so important about this job that I gotta be all that glad about it. … So I'm not going to stand by and allow these people to treat me like crap because I should be happy that I have a job. So as far as I'm concerned, this job is not that important. So it truly and ultimately boils down to me being able to live with me – and not what they ask me to do. And for me, as long as my wife and kids can still look at me in the face, understanding that I'm not doing what I wanna do but that I'm doing what I need to do and they still love me, I'm okay with that. Ultimately, I'm okay with that. I can live with that" (C/FM/T, male, U.S.).

The highest level of these escalation steps is the acceptance of a potential job loss and the "I do not care but just go with it" attitude which some of the respondents

displayed: “If people ask me, if I’m laid off, the way I see it, I have two choices: to bump or accept it that maybe it’s time for me…again it’s fate. You know, I’m not religious but I believe in the existence of…anyway maybe it’s fate telling me to start looking for a job elsewhere because I have a very long commute every day” (AA, female, U.S.).

Being proactive. The fifth and last type of coping strategy I observed in my interviews was the attempt to actively deal with the threat to one’s job. Here, again, different patterns emerged depending on a respondent’s individual situation. One fraction sought to re-model their jobs in such a way that they would be able to stay with the organizations, while the other group actively prepared for the time after a lay-off. Those belonging to the first group tried to make themselves indispensable: “So at that point, I was like, hmm, I got to get myself in a place where I’m going to be needed. … So I strategically convinced my boss to put me into a different position – and it worked out. ... So, now, even if they got rid of other units, they just spent a million dollars on this center. It’s not going anywhere. They’re going to need somebody to run it. They’re going to need somebody to be there. And now, that’s me” (AA, female, no information on research site to ensure confidentiality).

Another strategy was to increase the organization’s revenue or suggest a strategic departmental restructuring, both of which could ensure that the employee kept his or her job. The following illustrates this perceived link between revenue and perceptions of job security: “I have to earn money for the school by bringing in an acceptable class and that's it. I just think in terms of numbers and that is what secures my job” (AD/D, male, no information on research site to ensure confidentiality). The

link between a suggested restructuring and perceived job security can also be seen in the following: “So I tried to figure out how to put myself into a position of value in that map rather than trying to maintain what I’ve got and hang on to where I am. ... I jumped into survival mode; I offered a deal. … So this protects my position, my income, my benefits, protects my program, everything. It turned out to be an acceptable proposition”, AD/D, male, U.S.).

The second group of the “proactives” concentrated their efforts on the time after a potential lay-off, which not only helps them to feel “prepared”, i.e., increase their perceived employment prospects, but also to reduce their level of anxieties, i.e., increase their affective job security. One way in which employees increased their perceived employment prospects was by participating in as much training as possible: “Yeah, while I have been working, I took many classes. It’s really cool here because classes are free. … It’s also one way of preparing myself just in case they lay me off, but also, like, if there might be, like, openings here later on that would require those skills then I can move up. But, you know, personally, it’s good to know that you are prepared, especially for me who has been here so long, I’m like an old block here now. [Laughs] So I’ve got to be competitive enough with whatever knowledge they have when it comes to computers. We shouldn’t stop going to school anyways. We should always learn” (C/FM/T, male, U.S.; employees in Germany, who actually did not tend to expect to lose their jobs, made similar statements).

Closely related to this general attitude that one needs to be “up-to-date” with one’s skills and knowledge is the tendency of those that seek to “be ready” for a termination either by constantly keeping an eye out for new employment opportunities

or by having the application materials for a new job ready: “So, that’s what’s makes me a little more confident now…my resume is ready [chuckles] in case, you know. You never know what’s going to happen” (AA, female, U.S.). Others also had alternative employment opportunities: “The only reason I don’t worry is that I always have a dairy farm to go back to“ (AA, female, U.S.).

In sum, one interesting and unexpected finding of my qualitative data analyses was that even those employees who had low levels of perceived job security still stressed the fact that they believed it was unlikely that they would actually be terminated. Although the tendency to rationalize unpleasant events and resolve cognitive dissonances by changing attitudes has been well-documented in the social psychology literature (Baumeister & Leary, 1995; Ditto et al., 1992; Festinger, 1957; Gilovich et al., 2002; Hewstone, 1989; Pandelaere & Dewitte, 2006; Tversky et al., 1974), the insight that workers tend to build and re-build their confidence about keeping their jobs and staying with their organizations is still of great theoretical and practical importance.

The theoretical implication is that individuals tend to choose different anchors and factors to construct the security they need to ensure (at least some level of) psychological well-being, i.e., they develop their own meanings of a situation depending on the situation and the context (Bartunek et al., 2002). The practical implication is that organizations can seek to help their employees feel secure about their jobs by respecting and preserving the various factors and cues that employees use to construct a sense of security even in a constantly changing and often uncertain working environment.

I attribute this tendency to construct job security based on personal and job characteristics to the human need for security. Having a reason to believe why others may lose their jobs but not oneself helps employees to "function" and to go on with their daily lives. Those who have already given up the hope that they will stay with the organization pursue the strategy of devaluing their jobs and preparing for new tasks outside their current situation. Again, this strategy is helpful to ensure psychological well-being and the maintenance of a positive self-image.

CHAPTER 7

CONCLUSION

The aim of this study was to examine the relationship between formal institutions and individual perceptions. To this end, I conducted two separate studies and analyzed the association between national-level labor market policies and individual-level perceptions of job security. The first study involved the analysis of large-scale survey data from the 2005 wave of the International Social Survey Program (ISSP), which I combined with country-level information on economic, institutional, and cultural characteristics. The second study was based on the qualitative analysis of in-depth interview data that I collected on employees from a university in Germany and one in the U.S. This combination of different types of data and data sources allowed me to combine a broad examination of the association between macro-level policies and micro-level perceptions of job security across varying contexts with an in-depth investigation of the antecedents and consequences of lacking of job security and thereby increased the reliability of my findings.

The starting point of my research was the implicit assumption that formal institutions impact individual behaviors in preconceived and straightforward ways, which is the assumption underlying the large bulk of the comparative research on welfare states and production systems. Hall and Soskice (2001a), for example, argued that formal institutions, such as labor laws and welfare provisions, enable firms to pursue specific business strategies. In countries with generous unemployment benefits and stringent employment protection, it is therefore less risky for employers and

employees to invest in training and the acquisition of skills than in countries without these benefits and protections. While this argument is highly plausible, it hinges on the assumption that generous unemployment benefits and stringent dismissal protection do indeed make workers confident about their future employment situation.

My work elucidates the effectiveness of formal institutions to instill confidence and positive expectations and thus channel individual behaviors by empirically analyzing the first step in the causal chain of this highly plausible argument, i.e., the question of whether institutions shape individual perceptions and attitudes, as this is the necessary condition for getting actors to behave in a particular way (e.g. acquiring certain types of skills). The particular focus of my work was on exchange situations that are characterized by unequal power between the two parties, such as an employee-employer relationship.

To account for the fact that formal institutions can achieve their stated goals in various ways, I distinguished between the following three types of institutional mechanisms: (1) mechanisms that seek to increase the power of the party with the greater dependence on the exchange outcome; (2) mechanisms that seek to provide assurance and thereby reduce the vulnerability of the exchange partner who has to deal with the negative consequences of a unilateral breach of the contract; (3) mechanisms that improve the relative position of those with greater dependence on the exchange outcome by establishing a reference group with considerably lower levels of protections.

Three types of labor market policies capture these three types of institutional mechanisms. Dismissal protection reduces the power-differentials between the

employee and the employer; unemployment benefits provide workers with compensation in case they are laid off by their employers; legislation allows the employment of temporary workers to increase the relative position of permanent employees (although the first and foremost intention of such legislations is to partly increase labor market flexibility for employers). The impacts of these three types of institutional mechanisms were explored in two studies.

The main findings of my quantitative analyses are that dismissal protection, which increases employees' position vis-à-vis their employers, does not make them feel more confident about keeping their jobs. Likewise, working in an environment where many other employees are less well protected against job loss (because they work on temporary and not permanent contracts) also does not increase workers' cognitive job security. Only the interaction of *both* types of formal institutions, i.e., the joint presence of stringent dismissal protection and a high proportion of temporary workers, as it is the case in countries such as Portugal, Spain, France, and Germany, makes workers confident about keeping their jobs. In contrast, unemployment benefits, which provide employees with compensation in case the employer terminates the employment relationship, have a positive and statistically significant association with affective job security; i.e., they reduce workers' worries associated with job loss. Generally speaking, formal institutions that reduce vulnerability or provide assurance thus seem to actually have the capacity to instil confidence and positive expectations.

The qualitative analyses of the in-depth interviews with university employees in Germany and the U.S. were helpful to better understand the findings of the quantitative study, which partly challenged the rational-choice assumption that

institutions impact individual perceptions and attitudes in a straightforward way. One main finding of this second study is that employees either know very little about formal policies, especially dismissal protection, or if they are informed about their rights and protections, they do not believe that those institutions that seek to reduce power differentials between the exchange partners would actually act in their interest and protect them against unfair treatment.

The qualitative study also confirmed that the impact of formal institutions which seek to reduce vulnerability can indeed help to reduce worries associated with potential job loss. Workers in Germany, who could expect to sustain their standard of living even in case of unemployment thanks to the social provisions, almost unanimously said that they would rely on unemployment benefits if they lost their jobs; workers in the U.S., on the other hand, were sceptical about the usefulness of unemployment benefits. In contrast to workers in Germany, the expectation of being able to quickly find a new job of comparable quality was much more reassuring for them.

A third important insight from the qualitative study and which is also in line with the findings from the quantitative analyses is that contextual factors on the macro-level are much less important for individuals' perceived job security than what is happening in their immediate environment. In particular, organizational changes, the perception of being (in)dispensable because of one's position or skills, and the relationships with management and supervisors are most the important factors for employees' confidence about keeping their jobs.

Taken together, the findings if my studies are both of theoretical and practical relevance. The theoretical implication of my research is that the effectiveness of formal institutions to generate confidence and positive expectations, and hence subsequently impact behaviors, is contingent on the specific mechanisms that are incorporated in the different types of formal institutions. My analyses showed that the relationship between policies and individual-level behavior is not as straightforward often assumed. Those policies that provide assurance by reducing vulnerability (unemployment benefits) seem to be more effective in instilling confidence and positive expectations than those that reduce power differentials in an exchange situation (dismissal protection). These policies are only effective when others of comparable rank are in a much more vulnerable position (i.e., in the presence of a large share of temporary workers), or vice versa.

In addition, several practical implications can also be drawn from the study. Governments and organizations in those countries with no or low levels of dismissal protection but generous unemployment benefits (e.g., Denmark) have less reason to worry about their workforce's perceived job security than governments and organizations in those countries with the opposite institutional configuration (e.g., Portugal). However, caution is required. Although dismissal protections fail to show a positive impact on workers' cognitive job security in the absence of a large proportion of temporary workers, cutting back these protections is not recommended. Even if the existing safeguards seem not to provide a feeling of security, removing them would certainly unsettle employees, as suggested by the work on relative deprivation.

Policy makers can use the findings of my analyses to evaluate existing labor market policies and to help inform the development of new policies with respect to their effectiveness in making workers feel secure about their jobs and providing them with confidence regarding their labor market prospects.

Organizations that seek to avoid the negative consequences of a lack of job security need to consider that the sources of such confidence can strongly vary across groups of employees. For some, it is particularly important to believe that they are indispensable for the organization thanks to their particular jobs, position, and skills. For others, a good relationship with management and supervisors is the main source of confidence. However, it can be stated that regularly providing employees with feedback and ensuring that organizational restructuring processes are accompanied by a clear and transparent communication strategy is important in general.

By examining the "subjective dimension" of economic life, this research supplements work done by economists and organizational psychologists. In contrast to the labor economists, who have used national employment institutions to explain *actual* labor market outcomes, this research examined the impact of labor market institutions on perceptions. Focusing on perceptions is important because they often entail real outcomes, even if based on "incorrect" interpretations of what is happening in one's environment. The expectation of a job loss, even though the job may actually not be endangered, has *real* consequences, as a broad body literature in organizational psychology and economics has shown. Employees suffer from the negative psychological and physiological consequences associated with the lack of job security, and employers have to deal with decreased loyalty, reduced organizational

commitment, and elevated turnover rates. The economy as a whole, moreover, can be harmed by slumps in consumer spending and excessive wage restraints.

In contrast to the organizational psychologists, who have used organizational characteristics and individual differences to explain *perceived* employment outcomes, this research focused on the effects of important context variables, i.e., national laws, policies, and regulations. Previous research has shown that jointly considering both higher and lower-level characteristics and their interactions is crucially important for social science research because associations between micro-level variables often vary across contexts (e.g., Allmendinger & Hackman, 1995; 1996; Anderson, 2009a; Becker, Huselid, Pickus, & Spratt, 1997; Hackman, 2003; Johns, 2006; Paxton, 2007).

Although the popularity of statistical multi-level techniques has increased and entered into all disciplines in the social sciences over the last several years, studies in organizational behavior have only applied multi-level analyses in a sparse way and used a rather narrow definition of context. While organizational characteristics have indeed been included in the analyses, the larger context in which organizations are embedded has largely been ignored (Anderson & Pontusson, 2007; Chung & van Oorschot, forthcoming; Erlinghagen, 2008 are some of the notable exceptions). My studies are an attempt to further close this gap.

Before concluding this paper with several avenues for future research, some limitations need to be mentioned. The first limitation relates to the structure of the quantitative data. Since the data used in the analyses are only cross-sectional, no causal statements can be drawn based on the analyses. Do institutions impact perceptions or do perceptions perhaps create demand for certain institutions? Although

it seems more likely that institutions impact perceptions than vice versa, especially given that labor market regulations and policies have been pretty stable in recent years (OECD Stats, 2009), both directions of causality are reasonable and possible.

An additional shortcoming is that important individual and organizational-level variables (e.g., type of contract, income, or organizational size) are not available in the data. Moreover, the effects of the two different types of labor market policies cannot be assessed separately, i.e., passive labor market policies or unemployment benefits that provide laid-off workers with the means to sustain their living even after job loss, and active labor market policies that help them to quickly find a new job by helping them in finding offers, preparing for interviews, or getting retrained. The reason for this shortcoming is that the expenditures for the two types of policies are highly correlated and therefore cannot be incorporated as separate variables into the models.

The qualitative study could also be improved by extending the in-depth interviews to employees working in other organizations and economic sectors. Although universities are an ideal setting for case studies on perceptions of job security, particularly when done in a cross-national comparative perspective, it is highly likely that private sector employees are much more sensitive to economic changes and that they have more varied working biographies that would allow the researcher to draw more in-depth conclusions about the impact of previous experiences (including those with formal institutions) on current feelings of job security.

These limitations, however, can also be valuable starting points for further research. First, future studies should investigate the causal relationships underlying the

phenomena described in this paper by using longitudinal data. Therefore, questions on subjective feelings of job security should be included in panel studies such as the German *Socio-Economic Panel* (SOEP), which has already incorporated questions on perceptions and attitudes, or the *American Panel Study of Income Dynamics* (PSID). Second, in order to explore whether the general conclusions about the relationships between macro-level institutions and micro-level perceptions described in this paper can also be found in other exchange situations characterized by unequal power and dependence, this type of study should be done in other research settings. An example for such an analysis could be the relationship between a producer and a consumer when of purchasing goods are involved whose quality is not easily assessed before consumption. Third, in order to further explore whether the differences between the abilities of the various institutional mechanisms to generate confidence and positive expectations can indeed be generalized, it would be useful to conduct experiments. An example for such a research project could be a trust game that involves unequal pay-off schemes between the exchange partners to capture the constellation of unequal power as contextual conditions are varied.

APPENDIX

Table A: Clustered Regression on Cognitive Job Security

	Model 1		**Model 2**		**Model 3**		**Model 4**	
	beta	se	beta	se	beta	se	beta	se
Intercept	2.531***	(0.14)	2.518***	(0.18)	2.550***	(0.17)	2.852***	(0.20)
Female	0.012	(0.03)	0.016	(0.03)	0.019	(0.03)	0.018	(0.03)
Single	-0.055**	(0.02)	-0.057**	(0.02)	-0.059**	(0.02)	-0.066**	(0.02)
Children	0.021	(0.02)	0.018	(0.02)	0.021	(0.02)	0.018	(0.02)
≤ 30 years	0.086*	(0.03)	0.086*	(0.04)	0.088*	(0.04)	0.080	(0.04)
≥ 50 years	0.051	(0.03)	0.041	(0.03)	0.041	(0.03)	0.047	(0.03)
Degree	-0.007	(0.01)	-0.018	(0.01)	-0.021*	(0.01)	-0.012	(0.01)
Training	0.156***	(0.03)	0.146***	(0.03)	0.137***	(0.03)	0.139***	(0.03)
Use of Skills	0.053***	(0.01)	0.052***	(0.01)	0.051***	(0.01)	0.050***	(0.01)
Public Servant	0.342***	(0.07)	0.349***	(0.08)	0.351***	(0.08)	0.340***	(0.08)
Union Member	0.103	(0.05)	0.068	(0.04)	0.079	(0.04)	0.098*	(0.04)
Managers and Professionals	-0.116**	(0.04)	-0.122**	(0.04)	-0.129**	(0.03)	-0.124**	(0.03)
Manual and Agricultural Workers	0.100**	(0.03)	0.102**	(0.03)	0.099**	(0.03)	0.098**	(0.03)
Elementary Occupations	-0.000	(0.03)	0.013	(0.03)	0.016	(0.03)	0.011	(0.03)
Reduced working hours	-0.074*	(0.03)	-0.070*	(0.03)	-0.073*	(0.03)	-0.074*	(0.03)
Supervisory Position	-0.040	(0.06)	-0.047	(0.06)	-0.053	(0.06)	-0.069	(0.06)
Relations with Management	0.188***	(0.02)	0.185***	(0.02)	0.185***	(0.02)	0.181***	(0.02)
Relations with Colleagues	0.043*	(0.02)	0.045*	(0.02)	0.046*	(0.02)	0.045*	(0.02)
Unempl. 2000-2005			-0.009	(0.02)	-0.004	(0.02)	-0.006	(0.01)
Decrease in Unemployment			0.143*	(0.06)	0.100	(0.06)	0.038	(0.05)
Uncertainty Avoidance			0.000	(0.00)	0.001	(0.00)	0.001	(0.00)
Unemployment Benefits			0.000	(0.00)	0.000***	(0.00)	0.000***	(0.00)
Dismissal Protection					-0.071	(0.04)	-0.250***	(0.05)
% of Temporary Employment					-0.000	(0.01)	-0.029**	(0.01)
DP*Temp							0.014***	(0.00)
Model Fit								
R^2	0.074		0.079		0.080		0.084	

Note: The significant coefficients are marked with† for p < 0.10, * for p < 0.05,** p < 0.01, and *** p < 0.001.
The Group variable is country code.
N (Level 1) = 12,583
N (Level 2) = 20

Table B: Clustered Regression on Perceived Employment Prospects

	Model 1		**Model 2**		**Model 3**	
	beta	se	beta	se	beta	se
Intercept	2.051***	(0.14)	2.647***	(0.17)	2.631***	(0.18)
Female	-0.065	(0.05)	-0.062	(0.04)	-0.060	(0.04)
Single	0.075*	(0.03)	0.074*	(0.03)	0.071*	(0.03)
Children	0.050	(0.03)	0.053*	(0.02)	0.052*	(0.02)
≤ 30 years	0.233***	(0.04)	0.246***	(0.03)	0.245***	(0.03)
≥ 50 years	-0.301***	(0.04)	-0.330***	(0.04)	-0.330***	(0.04)
Degree	0.070**	(0.02)	0.040**	(0.01)	0.040**	(0.01)
Training	0.061	(0.03)	0.026	(0.02)	0.025	(0.02)
Use of Skills	0.075**	(0.02)	0.056**	(0.02)	0.056**	(0.02)
Public Servant	-0.088	(0.05)	-0.078	(0.04)	-0.078	(0.04)
Union Member	-0.053	(0.08)	-0.144**	(0.04)	-0.153***	(0.04)
Managers and Professionals	-0.052	(0.04)	-0.017	(0.03)	-0.017	(0.03)
Manual and Agricultural Workers	0.041	(0.04)	0.044	(0.04)	0.046	(0.04)
Elementary Occupations	0.180**	(0.05)	0.161**	(0.05)	0.162**	(0.05)
Reduced working hours	0.100*	(0.05)	0.075	(0.04)	0.072	(0.04)
Supervisory Position	0.050	(0.03)	0.037	(0.03)	0.037	(0.03)
Relations with Management	-0.016	(0.02)	-0.021	(0.02)	-0.021	(0.02)
Relations with Colleagues	0.005	(0.02)	-0.006	(0.02)	-0.006	(0.02)
Unempl. 2000-2005			-0.012	(0.03)	-0.015	(0.03)
Decrease in Unemployment			0.233	(0.12)	0.235	(0.12)
Uncertainty Avoidance			-0.006**	(0.00)	-0.006**	(0.00)
Dismissal Protection			0.050	(0.07)	0.038	(0.08)
% of Temporary Employment			-0.001	(0.00)	-0.000	(0.00)
Unemployment Benefits					.	.
Model Fit						
R^2	0,050		0,077		0,077	

Note: The significant coefficients are marked with $p < 0.05$,** $p < 0.01$, and *** $p < 0.001$.
The Group variable is country code.
N (Level 1) = 12,583
N (Level 2) = 20

Table C: Clustered Regression on Affective Job Security

	Model 1		**Model 2**		**Model 3**		**Model 4**	
	beta	se	beta	se	beta	se	beta	se
Intercept	1.763***	(0.14)	2.427***	(0.16)	2.333***	(0.14)	2.012***	(0.15)
Female	-0.072*	(0.03)	-0.073**	(0.03)	-0.060*	(0.02)	-0.053*	(0.02)
Single	-0.035	(0.03)	-0.047	(0.02)	-0.063**	(0.02)	-0.072**	(0.02)
Children	-0.007	(0.02)	-0.001	(0.02)	-0.010	(0.02)	-0.016	(0.02)
≤ 30 years	0.064	(0.04)	0.081*	(0.03)	0.078*	(0.03)	0.048	(0.03)
≥ 50 years	0.077*	(0.03)	0.061*	(0.03)	0.060*	(0.03)	0.100**	(0.03)
Degree	0.062***	(0.01)	0.045***	(0.01)	0.045***	(0.01)	0.040***	(0.01)
Training	0.110***	(0.02)	0.078***	(0.02)	0.070***	(0.02)	0.067**	(0.02)
Use of Skills	0.057***	(0.01)	0.041***	(0.01)	0.041***	(0.01)	0.034***	(0.01)
Public Servant	0.161***	(0.03)	0.156***	(0.03)	0.157***	(0.03)	0.166***	(0.03)
Union Member	0.095**	(0.03)	0.052	(0.04)	0.000	(0.02)	0.019	(0.02)
Managers and Professionals	-0.002	(0.02)	0.011	(0.02)	0.009	(0.02)	0.011	(0.02)
Manual and Agricultural Workers	-0.068	(0.04)	-0.076	(0.04)	-0.065	(0.04)	-0.071	(0.04)
Elementary Occupations	-0.123**	(0.03)	-0.138***	(0.03)	-0.133***	(0.03)	-0.153***	(0.03)
Reduced working hours	0.122**	(0.04)	0.093**	(0.03)	0.078**	(0.03)	0.069*	(0.03)
Supervisory Position	0.054**	(0.02)	0.037	(0.02)	0.037	(0.02)	0.033	(0.02)
Relations with Management	0.104***	(0.01)	0.104***	(0.01)	0.102***	(0.01)	0.104***	(0.01)
Relations with Colleagues	0.083***	(0.02)	0.066***	(0.01)	0.068***	(0.01)	0.068***	(0.01)
Unempl. 2000-2005			-0.014	(0.02)	-0.029	(0.02)	-0.027	(0.02)
Decrease in Unemployment			-0.007	(0.10)	0.008	(0.08)	-0.020	(0.08)
Uncertainty Avoidance			-0.003	(0.00)	-0.001	(0.00)	0.000	(0.00)
Dismissal Protection			-0.010	(0.05)	-0.078	(0.05)	-0.083	(0.05)
% of Temporary Employment			-0.007	(0.00)	-0.006*	(0.00)	-0.006*	(0.00)
Unemployment Benefits					0.000**	(0.00)	0.000**	(0.00)
Perceived Employment Security							0.122***	(0.01)
Model Fit								
R^2	0.0831		0.1019		0.1131		0.1339	

Note: The significant coefficients are marked with† for $p < 0.10$, * for $p < 0.05$,** $p < 0.01$, and *** $p < 0.001$.
The Group variable is country code.
N (Level 1) = 12,583
N (Level 2) = 20

Table D: Random Coefficient Model on Cognitive Job Security

	Model 1		**Model 2**		**Model 3**		**Model 4**		**Model 5**	
	beta	se	beta	se	beta	se	beta	se	beta	se
Fixed Part										
Intercept	3.636***	(0.04)	2.405***	(0.15)	2.407***	(0.15)	2.405***	(0.15)	2.818***	(0.15)
Level 1										
Female			0.019	(0.03)	0.019	(0.03)	0.019	(0.03)	0.021	(0.03)
Single			-0.072**	(0.02)	-0.072**	(0.02)	-0.072**	(0.02)	-0.072**	(0.02)
Children			0.017	(0.02)	0.017	(0.02)	0.017	(0.02)	0.016	(0.02)
≤ 30 years			0.084*	(0.04)	0.084*	(0.04)	0.084*	(0.04)	0.084*	(0.04)
≥ 50 years			0.052	(0.04)	0.052	(0.04)	0.052	(0.04)	0.055	(0.04)
Degree			-0.005	(0.01)	-0.006	(0.01)	-0.006	(0.01)	-0.005	(0.01)
Training			0.146***	(0.02)	0.146***	(0.02)	0.146***	(0.02)	0.145***	(0.02)
Use of Skills			0.049***	(0.01)	0.049***	(0.01)	0.049***	(0.01)	0.049***	(0.01)
Public Servant			0.355***	(0.03)	0.355***	(0.03)	0.355***	(0.03)	0.352***	(0.03)
Union Member			0.102***	(0.02)	0.102***	(0.02)	0.102***	(0.02)	0.106***	(0.02)
Managers and Professionals			0.011	(0.03)	0.011	(0.03)	0.011	(0.03)	0.010	(0.03)
Manual and Agricultural Workers			-0.073*	(0.03)	-0.073*	(0.03)	-0.072*	(0.03)	-0.072*	(0.03)
Elementary Occupations			-0.067	(0.04)	-0.067	(0.04)	-0.067	(0.04)	-0.069	(0.04)
Reduced working hours			-0.123***	(0.02)	-0.123***	(0.02)	-0.124***	(0.02)	-0.124***	(0.02)
Supervisory Position			0.101***	(0.02)	0.101***	(0.02)	0.101***	(0.02)	0.099***	(0.02)
Relations with Management			0.180***	(0.01)	0.180***	(0.01)	0.180***	(0.01)	0.180***	(0.01)
Relations with Colleagues			0.045**	(0.01)	0.045**	(0.01)	0.045**	(0.01)	0.045**	(0.01)
Level 2										
Unempl. 2000-2005			-0.004	(0.02)	-0.002	(0.02)	-0.002	(0.02)	-0.009	(0.01)
Decrease in Unemployment			0.163*	(0.07)	0.153*	(0.07)	0.150*	(0.07)	0.083	(0.05)
Uncertainty Avoidance			0.000	(0.00)	0.001	(0.00)	0.001	(0.00)	0.001	(0.00)
Unemployment Benefits			0.000	(0.00)	0.000	(0.00)	0.000	(0.00)	0.000***	(0.00)
Dismissal Protection					-0.018	(0.06)	-0.031	(0.06)	-0.254***	(0.07)
% of Temporary Employment							0.003	(0.00)	-0.033***	(0.01)
DP*Temp									0.017***	(0.00)
Random Part										
√e (Level 1)	1.107		1.066		1.066		1.066		1.066	
√u (Level 2)	0.159		0.109		0.109		0.107		0.057	
Female			0.087		0.086		0.087		0.082	
≤ 30 years			0.124		0.123		0.125		0.122	
≥ 50 years			0.109		0.108		0.110		0.117	
Degree			0.014		0.013		0.014		0.011	
Model Fit										
R^2 (Level1)			0.987		0.990		0.991		0.997	
R^2 (Level2)			0.700		0.993		0.993		0.995	
Deviance	38330.5		37401.79		37401.7		37401.354		37388.49	
rho	0.021									

Note: The significant coefficients are marked with * for $p < 0.05$,** $p < 0.01$, and *** $p < 0.001$.
The Group variable is country code; gender, age, and education are introduced as random variables.
N (Level 1) = 12,583
N (Level 2) = 20

Table E: Random Coefficient Model on Perceived Employment Prospects

	Model 1		**Model 2**		**Model 3**	
	beta	se	beta	se	beta	se
Fixed Part						
Intercept	2.609***	(0.06)	2.654***	(0.18)	2.600***	(0.19)
Level 1						
Female			-0.057	(0.04)	-0.056	(0.04)
Single			0.066**	(0.02)	0.065**	(0.02)
Children			0.039	(0.02)	0.039	(0.02)
≤ 30 years			0.232***	(0.03)	0.232***	(0.03)
≥ 50 years			-0.322***	(0.04)	-0.322***	(0.04)
Degree			0.026**	(0.01)	0.026**	(0.01)
Training			0.020	(0.02)	0.020	(0.02)
Use of Skills			0.064***	(0.01)	0.064***	(0.01)
Public Servant			-0.134***	(0.03)	-0.133***	(0.03)
Union Member			-0.135***	(0.02)	-0.137***	(0.02)
Managers and Professionals			-0.024	(0.03)	-0.024	(0.03)
Manual and Agricultural Workers			0.041	(0.03)	0.041	(0.03)
Elementary Occupations			0.124**	(0.04)	0.124**	(0.04)
Reduced working hours			0.071**	(0.02)	0.070**	(0.02)
Supervisory Position			0.036	(0.02)	0.036	(0.02)
Relations with Management			-0.016	(0.01)	-0.016	(0.01)
Relations with Colleagues			-0.007	(0.01)	-0.007	(0.01)
Level 2						
Unempl. 2000-2005			-0.017	(0.02)	-0.023	(0.03)
Decrease in Unemployment			0.245*	(0.10)	0.251*	(0.10)
Uncertainty Avoidance			-0.007**	(0.00)	-0.006*	(0.00)
Dismissal Protection			0.100	(0.08)	0.071	(0.08)
% of Temporary Employment			0.001	(0.01)	0.001	(0.01)
Unemployment Benefits					0.000	(0.00)
Random Part						
√e (Level 1)	1.103		1.073		1.073	
√u (Level 2)	0.265		0,163		0.159	
Female			0.142		0.142	
≤ 30 years			0.088		0.089	
≥ 50 years			0.123		0.124	
Degree			0.016		0.016	
Model Fit						
Deviance			37599.15		37598.34	
rho	0.058					

Note: The significant coefficients are marked with * for $p < 0.05$,** $p < 0.01$, and *** $p < 0.001$.
The Group variable is country code; gender, age, and education are introduced as random variables.
N (Level 1) = 12,583
N (Level 2) = 20

Table F: Random Coefficient Model on Affective Job Security

	Model 1		**Model 2**		**Model 3**		**Model 4**	
	beta	se	beta	se	beta	se	beta	se
Fixed Part								
Intercept	3.178***	(0.06)	2.556***	(0.18)	2.353***	(0.15)	1.364***	(0.16)
Level 1								
Female			-0.051**	(0.02)	-0.051**	(0.02)	-0.051***	(0.02)
Single			-0.057**	(0.02)	-0.059**	(0.02)	-0.043**	(0.02)
Children			-0.011	(0.02)	-0.012	(0.02)	-0.021	(0.02)
≤ 30 years			0.073*	(0.03)	0.074*	(0.03)	0.024	(0.03)
≥ 50 years			0.049	(0.03)	0.049	(0.03)	0.068**	(0.02)
Degree			0.025**	(0.01)	0.025**	(0.01)	0.024**	(0.01)
Training			0.064***	(0.02)	0.064***	(0.02)	0.018	(0.02)
Use of Skills			0.046***	(0.01)	0.046***	(0.01)	0.025***	(0.01)
Public Servant			0.147***	(0.02)	0.147***	(0.02)	0.056**	(0.02)
Union Member			-0.036	(0.02)	-0.037	(0.02)	-0.055**	(0.02)
Managers and Professionals			0.007	(0.02)	0.007	(0.02)	0.007	(0.02)
Manual and Agricultural Workers			-0.062**	(0.02)	-0.062*	(0.02)	-0.045*	(0.02)
Elementary Occupations			-0.128***	(0.03)	-0.129***	(0.03)	-0.120***	(0.03)
Reduced working hours			0.059**	(0.02)	0.059**	(0.02)	0.087***	(0.02)
Supervisory Position			0.055**	(0.02)	0.054**	(0.02)	0.021	(0.02)
Relations with Management			0.110***	(0.01)	0.109***	(0.01)	0.058***	(0.01)
Relations with Colleagues			0.066***	(0.01)	0.066***	(0.01)	0.054***	(0.01)
Level 2								
Unempl. 2000-2005			-0.029	(0.03)	-0.049*	(0.02)	-0.046*	(0.02)
Decrease in Unemployment			0.068	(0.11)	0.094	(0.08)	0.022	(0.09)
Uncertainty Avoidance			-0.004	(0.00)	-0.000	(0.00)	0.000	(0.00)
Dismissal Protection			0.043	(0.08)	-0.067	(0.06)	-0.062	(0.07)
% of Temporary Employment			-0.007	(0.01)	-0.005	(0.00)	-0.005	(0.01)
Unemployment Benefits					0.000***	(0.00)	0.000***	(0.00)
Cognitive Jobsecurity							0.295***	(0.01)
Perceived Employment Security							0.104***	(0.01)
Random Part								
√e (Level 1)	0.869		0.845		0.844		0.774	
√u (Level 2)	0.267		0.185		0.125		0.147	
Female			0.039		0.041		0.000	
≤ 30 years			0.092		0.094		0.077	
≥ 50 years			0.079		0.080		0.053	
Degree			0.014		0.015		0.014	
Model Fit								
Deviance			31566.45		31553.12		29346.48	
rho	0.091							

Note: The significant coefficients are marked with * for $p < 0.05$,** $p < 0.01$, and *** $p < 0.001$.
The Group variable is country code; gender, age, and education are introduced as random variables.
N (Level 1) = 12,583
N (Level 2) = 20

Table G: Standardized Values of Random Intercept Models on Cognitive Job Security

	Standardized values of Cognitive Job Security									
	Model 1		**Model 2**		**Model 3**		**Model 4**		**Model 5**	
	beta	se	beta	se	beta	se	beta	se	beta	se
Fixed Part										
Intercept	0.015	(0.03)	0.020	(0.02)	0.016	(0.02)	0.016	(0.02)	-0.034	(0.02)
Level 1										
Female (std)			0.008	(0.01)	0.008	(0.01)	0.008	(0.01)	0.008	(0.01)
Single (std)			-0.030**	(0.01)	-0.030**	(0.01)	-0.030**	(0.01)	-0.030**	(0.01)
Children (std)			0.007	(0.01)	0.007	(0.01)	0.007	(0.01)	0.007	(0.01)
≤ 30 years (std)			0.030**	(0.01)	0.030**	(0.01)	0.030**	(0.01)	0.029**	(0.01)
≥ 50 years (std)			0.016	(0.01)	0.016	(0.01)	0.016	(0.01)	0.017	(0.01)
Degree (std)			-0.008	(0.01)	-0.009	(0.01)	-0.009	(0.01)	-0.008	(0.01)
Training (std)			0.066***	(0.01)	0.066***	(0.01)	0.066***	(0.01)	0.065***	(0.01)
Use of Skills (std)			0.044***	(0.01)	0.044***	(0.01)	0.044***	(0.01)	0.044***	(0.01)
Public Servant (std)			0.127***	(0.01)	0.127***	(0.01)	0.127***	(0.01)	0.126***	(0.01)
Union Member (std)			0.040***	(0.01)	0.040***	(0.01)	0.040***	(0.01)	0.041***	(0.01)
Managers and Professionals (std)			0.006	(0.01)	0.006	(0.01)	0.006	(0.01)	0.005	(0.01)
Manual and Agricultural Workers (std)			-0.026*	(0.01)	-0.026*	(0.01)	-0.026*	(0.01)	-0.026*	(0.01)
Elementary Occupations (std)			-0.014	(0.01)	-0.014	(0.01)	-0.014	(0.01)	-0.015	(0.01)
Reduced working hours (std)			-0.046***	(0.01)	-0.047***	(0.01)	-0.047***	(0.01)	-0.047***	(0.01)
Supervisory Position (std)			0.043***	(0.01)	0.043***	(0.01)	0.043***	(0.01)	0.042***	(0.01)
Relations with Management (std)			0.150***	(0.01)	0.150***	(0.01)	0.150***	(0.01)	0.150***	(0.01)
Relations with Colleagues (std)			0.030**	(0.01)	0.030**	(0.01)	0.030**	(0.01)	0.030**	(0.01)
Level 2										
Unempl. 2000-2005 (std)			-0.010	(0.03)	0.001	(0.03)	0.001	(0.03)	-0.010	(0.02)
Decrease in Unempl. (std)			0.058*	(0.03)	0.043	(0.03)	0.043	(0.03)	0.021	(0.02)
Uncertainty Avoidance (std)			0.007	(0.03)	0.031	(0.03)	0.032	(0.03)	0.039	(0.02)
Unemployment Benefits (std)			0.036	(0.03)	0.051	(0.03)	0.051	(0.03)	0.072***	(0.02)
Dismissal Protection (std)					-0.051	(0.04)	-0.047	(0.04)	-0.046	(0.03)
% of Temporary Employment (std)							-0.006	(0.03)	-0.031	(0.02)
DP*Temp (std)									0.089***	(0.02)
Random Part										
√e (Level 1)	0,982		0,948		0,948		0,948		0,948	
√u (Level 2)	0,141		0,099		0,093		0,093		0,064	
Model Fit										
R^2 (Level1)			0,268		0,268		0,268		0,268	
R^2 (Level2)			0,614		0,657		0,658		0,839	
Deviance			34393,85		34391,92		34391,87		34379,98	
AIC	35298.45		34441.85		34441.92		34443.87		34433.98	
BIC	35320.77		34620.42		34627.92		34637.31		34634.86	

Note: The significant coefficients are marked with * for p < 0.05,** p < 0.01, and *** p < 0.001.
The Group variable is country code.
N (Level 1) = 12,583
N (Level 2) = 20

Table H: Standardized Values of Random Intercept Models on Perceived Employment Prospects

	Model 1		**Model 2**		**Model 3**	
	beta	se	beta	se	beta	se
Fixed Part						
Intercept	-0.012	(0.05)	-0.003	(0.04)	-0.004	(0.04)
Level 1						
Female (std)			-0.027**	(0.01)	-0.026**	(0.01)
Single (std)			0.029**	(0.01)	0.028**	(0.01)
Children (std)			0.017	(0.01)	0.017	(0.01)
≤ 30 years (std)			0.081***	(0.01)	0.080***	(0.01)
≥ 50 years (std)			-0.129***	(0.01)	-0.129***	(0.01)
Degree (std)			0.036**	(0.01)	0.036**	(0.01)
Training (std)			0.009	(0.01)	0.009	(0.01)
Use of Skills (std)			0.058***	(0.01)	0.058***	(0.01)
Public Servant (std)			-0.046***	(0.01)	-0.046***	(0.01)
Union Member (std)			-0.056***	(0.01)	-0.056***	(0.01)
Managers and Professionals (std)			-0.011	(0.01)	-0.011	(0.01)
Manual and Agricultural Workers (std)			0.016	(0.01)	0.016	(0.01)
Elementary Occupations (std)			0.027**	(0.01)	0.027**	(0.01)
Reduced working hours (std)			0.032***	(0.01)	0.032***	(0.01)
Supervisory Position (std)			0.014	(0.01)	0.014	(0.01)
Relations with Management (std)			-0.014	(0.01)	-0.014	(0.01)
Relations with Colleagues (std)			-0.004	(0.01)	-0.004	(0.01)
Level 2						
Unempl. 2000-2005 (std)			-0.004	(0.04)	-0.009	(0.04)
Decrease in Unempl. (std)			0.089*	(0.04)	0.090*	(0.04)
Uncertainty Avoidance (std)			-0.163***	(0.05)	-0.151**	(0.05)
Dismissal Protection (std)			0.032	(0.06)	0.019	(0.06)
% of Temporary Employment (std)			0.012	(0.04)	0.015	(0.04)
Unemployment Benefits (std)					0.024	(0.05)
Random Part						
√e (Level 1)	0,971		0,948		0,948	
√u (Level 2)	0,234		0,160		0,159	
Model Fit						
Deviance			34431,87		34426,85	
AIC			34481,87		34478,85	
BIC			34667,87		34672,29	
rho	0.06					

Note: The significant coefficients are marked with * for $p < 0.05$,** $p < 0.01$, and *** $p < 0.001$.
The Group variable is country code.
N (Level 1) = 12,583
N (Level 2) = 20

Table I: Standardized Values of Random Intercept Models on Affective Job Security

	Model 1		**Model 2**		**Model 3**		**Model 4**	
	beta	se	beta	se	beta	se	beta	se
Fixed Part								
Intercept	-0.000	(0.06)	-0.011	(0.04)	-0.016	(0.03)	-0.324***	(0.04)
Level 1								
Female (std)			-0.026**	(0.01)	-0.026**	(0.01)	-0.029***	(0.01)
Single (std)			-0.032***	(0.01)	-0.033***	(0.01)	-0.022*	(0.01)
Children (std)			-0.009	(0.01)	-0.009	(0.01)	-0.012	(0.01)
≤ 30 years (std)			0.031***	(0.01)	0.031***	(0.01)	0.009	(0.01)
≥ 50 years (std)			0.027**	(0.01)	0.027**	(0.01)	0.034***	(0.01)
Degree (std)			0.039***	(0.01)	0.039***	(0.01)	0.037***	(0.01)
Training (std)			0.036***	(0.01)	0.036***	(0.01)	0.010	(0.01)
Use of Skills (std)			0.048***	(0.01)	0.048***	(0.01)	0.028***	(0.01)
Public Servant (std)			0.062***	(0.01)	0.062***	(0.01)	0.025**	(0.01)
Union Member (std)			-0.020*	(0.01)	-0.020*	(0.01)	-0.029**	(0.01)
Managers and Professionals (std)			0.004	(0.01)	0.004	(0.01)	0.005	(0.01)
Manual and Agricultural Workers (std)			-0.029**	(0.01)	-0.029**	(0.01)	-0.020*	(0.01)
Elementary Occupations (std)			-0.038***	(0.01)	-0.038***	(0.01)	-0.032***	(0.01)
Reduced working hours (std)			0.035***	(0.01)	0.035***	(0.01)	0.044***	(0.01)
Supervisory Position (std)			0.032***	(0.01)	0.032***	(0.01)	0.011	(0.01)
Relations with Management (std)			0.112***	(0.01)	0.112***	(0.01)	0.061***	(0.01)
Relations with Colleagues (std)			0.056***	(0.01)	0.056***	(0.01)	0.046***	(0.01)
Level 2								
Unempl. 2000-2005 (std)			-0.045	(0.05)	-0.078	(0.04)	-0.078	(0.04)
Decrease in Unempl. (std)			0.012	(0.05)	0.021	(0.04)	-0.004	(0.04)
Uncertainty Avoidance (std)			-0.090	(0.06)	-0.005	(0.05)	0.001	(0.05)
Dismissal Protection (std)			0.006	(0.07)	-0.082	(0.06)	-0.066	(0.06)
% of Temporary Employment (std)			-0.074	(0.05)	-0.057	(0.04)	-0.054	(0.04)
Unemployment Benefits (std)					0.161***	(0.04)	0.138**	(0.05)
Standardized values of (jobsec_cog)							0.369***	(0.01)
Perceived Employment Security							0.115***	(0.01)
Random Part								
√e (Level 1)	0,960		0,935		0,935		0,857	
√u (Level 2)	0,295		0,193		0,144		0,159	
Model Fit								
Deviance			35132,91		35121,84		31881,07	
rho	0,084							

Note: The significant coefficients are marked with * for $p < 0.05$,** $p < 0.01$, and *** $p < 0.001$.
The Group variable is country code.
N (Level 1) = 12,583
N (Level 2) = 20

Interview Schedule

R_____
Date:_____
Time Started:_____
Time Ended:_____

Introduction

I'm doing this study to learn more about how people see their professional future, what they think about their labor market prospects, what makes them feel confident and secure about their work, and what – if anything – usually worries them about jobs and future careers. Before we start, do you have any questions for me?

Here is a confidentiality agreement that I developed together with the data protection officer at HU and with the Institutional Review Board at Cornell. Please take your time reading the agreement. If you feel comfortable, please sign it. I'll be taking notes and would like to tape what you say if that's okay with you. But please feel free to ask me to turn off the tape at anytime or take a break.

PART I

Professional Development and Instabilities in Careers and Jobs

To start the interview, people usually tell me about their career and employment history. Only later in the interview will I ask some specific questions. So, if it is okay with you, I would be happy to hear how you got to where you are today. Please start with whatever you feel like.

Possible suggestions:

- Why did you apply for a job at CU/HU?
- Why did you choose a certain career?
- Why have you (never) changed your employer?
- When did you know that you wanted to become… ?

- If you compare your current work situation with the work situation when you first started working for HU/CU, what has changed?
- What phases of instability have you faced in your working life?
- Please tell me a bit about these phases. How did you feel? How did these phases impact other aspects of your life (e.g., family/social life)? How did you deal with … (such phases of instability and uncertainty)?

Uncertainties, Anxieties, and Frustrations at Work

Now I would like to hear something about your current job. What would be especially interesting to me is to learn about those things that you like about your current job and

those that you find frustrating and maybe even scary. Again, please start with whatever you like.

Possible suggestions:

Please tell me about the

- formal and informal hierarchies at work,
- your relationships with your colleagues and your supervisor,
- open or hidden rivalries,
- evaluation and promotion practices in your department/unit.

- Every now and then, we are confronted with the fear of not knowing what is going to happen next and often this perspective worries us. Can you please tell me about such a situation in your working life?
- How did you deal with this situation? What factors contributed to/reduced this uncertainty?

Additional questions if answers go in the direction of cognitive job security

- How important is job security to you?
- Was job security an important factor when you decided to work for CU/HU?
- If you compare your current job situation to those of your colleagues, how does your job situation differ (for example with regard to the security they have in staying in their current position)?

- What will your professional future look like? What types of changes do you expect?
- What are your biggest worries related to work?

Additional questions if answers go in the direction of cognitive job security

- Have you always been worried about losing your job?
- If yes/no, why?

Implicit Promises and Legal Rights Associated with the Employment Contract

Working for someone or an organization implies mutual giving and taking.

- Thinking about work in these terms, what are your obligations vis-à-vis HU/CU?
- From the other direction, what are the obligations of HU/CU vis-à-vis you?

  Possible additional questions:

  To what extent do you feel obliged to stay with your employer?
  To what extent is your employer obligated to have good reasons or 'good cause' to discharge you?
  In the past, how has HU/CU handled lay-offs?

Experience with unemployment

Please tell me about the periods of time in your life when you did not have work and were looking for a job.

Possible additional questions:

- How long were you unemployed and how often?
- How much unemployment benefits would you receive if you were to receive a lay-off notice today?
- Are any family members, friends, or neighbors currently unemployed?

Possible additional questions:

- Have they had trouble finding a new job?
- In what respect does their unemployment affect you?

Participation in Training

Please tell me about the training possibilities here at CU/HU?

- What types of training have you participated in?

Possible additional questions:

- On whose initiative did you participate in this training/these trainings?
- How often did you participate?
- Will the skills you acquired in these trainings also be useful when you change jobs/employers?

PART II

Demographic Characteristics and Job Characteristics

1. How old are you?
2. Are you married?

   If yes, does your spouse work outside the home?

   __ Yes, full time
   __ Yes, part time
   __ No, studies and/or takes care of child(ren)
   __ No, retired or unemployed)

3. Do you have kids? If yes, how many?
4. What is your education?
5. Are you or have you been member of a union?
6. For how many employers do you work?
7. What type of position do you hold at HU/CU?
8. On how many temporary contracts have you worked in your entire working career (i.e., including the time before you came to CU)?
9. Do you work full-time or part-time?
10. Do you supervise others at work?

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